Virginia Tech Board of Visitors Meeting
June 3-4, 2018

Minutes:

A. Minutes: Academic, Research, and Student Affairs Committee

B. Minutes: Buildings and Grounds Committee

C. Minutes: Compliance, Audit, and Risk Committee

D. Minutes: Finance and Resource Management Committee

E. Minutes: Governance and Administration Committee

F. Resolution: Approval of the 2018-19 Pratt Fund Budgets

G. Resolution: Approval of the Discontinuance of the Bachelor of Science Degree in Environmental Policy and Planning

H. Resolution: Approval to Adopt the Virginia Tech Carilion School of Medicine Student Honor Code, Attributes of Professionalism, and Teacher-Learner Compact

I. Resolution: Approval to Revise the Graduate Honor System Constitution

J. Resolution: Approval to Clarify Faculty Handbook Language on Research Faculty Promotion Process

K. Resolution: Approval to Clarify Faculty Handbook Language on Overload Compensation for Research Faculty Members Teaching Credit Classes

L. Resolution: Approval to Clarify Language in Faculty Handbook on Removal Processes for Research Faculty Members

M. Resolution: Approval to Revise University Policies Regarding Textbooks and Create Guidelines for Open Educational Resources to Comply with Amended Code of Virginia §23.1-1308

N. Resolution: Approval of New and Revised Language in Faculty Handbook Regarding Alumni Distinguished Professors

O. Resolution: Approval for an Ingress and Egress Easement to the New River Valley Regional Water Authority

P. Resolution: Approval of Appointment to the New River Valley Regional Water Authority

Q. Resolution: Approval of the 2018-19 Hotel Roanoke Conference Center Commission Budget

R. Resolution: Approval of the 2018-19 Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences Budget

S. Resolution: Approval to Reappoint University Commissioner to the Hotel Roanoke Conference Center Commission

T. Report: Research and Development Disclosures

U. Report: Information Session June 3, 2018

V. Resolution: Approval of a New Degree, Bachelor of Arts in Science, Technology, and Society

W. Resolution: Approval of a New Degree, Bachelor of Science in Science, Technology, and Society

X. Resolution: Approval of Agreement to Amend the Articles of Incorporation of the Montgomery Regional Solid Waste Authority and to Extend Term of User Agreement Between the Authority and the University

Y. Resolution: Approval of Appointments to the Montgomery Regional Solid Waste Authority

Z. Resolution: Approval on Report and Recommendation Regarding Quasi-Endowments

AA. Resolution: Approval on University Lines of Credit

BB. Resolution: Approval of 2018-19 Faculty Compensation Plan

CC. Resolution: Approval of the 2018-19 Auxiliary Systems Budgets: Dormitory and Dining Hall System, Electric Service Utility System, University Services System, Athletic Facilities System

DD. Resolution: Approval of the 2018-19 University Budget: Operating and Capital

EE. Resolution: Approval of Year-to-Date Financial Performance Report (July 1, 2017 – March 31, 2018)

FF. Resolution: Approval of the Capital Project for Planning the Slusher Hall Replacement

GG. Resolution: Approval of the Capital Project to Supplement the Dietrick First Floor and Plaza Renovation

HH. Report: President's Report

II. Report: Constituent Reports

JJ. Resolution: Approval of Emeritus Requests (4)

KK. Resolution: Approval of Endowed Chairs, Professorships, and Fellowships (1)

LL. Resolution: Approval of the Exception to the Virginia Conflict of Interests Act (2)

MM. Resolution: Approval of Faculty Research Leave (1)

NN. Resolution: Ratification of the Personnel Changes Report

OO. Resolution: Approval of 2018-19 Promotion, Tenure, and Continued Appointment Program (125)

PP. Resolution: Naming of University Facility (1)

QQ. Resolution: Approval of Special Recognitions (2)

Approved

MINUTES

June 4, 2018

The Board of Visitors of Virginia Polytechnic Institute and State University met on Monday, June 4, 2018, at 1:17 p.m. in Torgersen Boardroom (Room 2100), Virginia Tech Campus, Blacksburg, Virginia.

Present	**Absent**
Ms. Greta J. Harris	
Mr. C. T. Hill	
Ms. Anna L. James	
Mr. Mehmood S. Kazmi	
Ms. Letitia A. Long	
Mr. Robert J. Mills	
Mr. L. Chris Petersen	
Ms. Deborah Leigh Martin Petrine (Vice Rector)	
Mr. Michael J. Quillen	
Mr. Wayne H. Robinson	
Mr. Mehul P. Sanghani	
Mr. Dennis H. Treacy (Rector)	
Mr. Horacio A. Valeiras	
Mr. Jeff Veatch	

Constituent Representatives:
Dr. Hans Robinson, Faculty Representative
Mr. Robert Sebek, Staff Representative
Mr. Brett Netto, Graduate Student Representative
Mr. Seyi Olusina, Undergraduate Student Representative

Also present were the following: President Timothy Sands, Ms. Kim O'Rourke, Mr. Zo Amani, Deputy Chief William Babb, Ms. Lori Buchanan, Mr. Brock Burroughs, Mr. Ralph Byers, Ms. D'Elia Chandler, Dr. Cyril Clarke, Ms. Shelia Collins, Mr. Al Cooper, Mr. John Cusimano, Dr. John Dooley, Mr. Corey Earles, Dr. Lance Franklin, Dr. Michael Friedlander, Ms. Rachel Gabriele, Dr. Guru Ghosh, Mr. David Guerin, Ms. Dee Harris, Dr. Luisa Havens Gerardo, Dr. Lee Hawthorne, Ms. Kay Heidbreder, Mr. Tim Hodge, Dr. Rachel Holloway, Ms. Elizabeth Hooper, Ms. Rachel Iwicki, Dr. Chris Kiwus, Ms. Sharon Kurek, Dr. Theresa Mayer, Ms. Heidi McCoy, Dr. Steve McKnight, Ms. Nancy Meacham, Dr. Scott Midkiff, Dr. Sally Morton, Mr. Mike Mulhare, Ms. April Myers, Mr. Mark Owczarski, Dr. Patty Perillo, Mr. Charles Phlegar, Dr. Ellen Plummer, Dr. Menah Pratt-Clarke, Mr. Chris Rahmes, Dr. Scot Ransbottom, Ms. Savita Sharma, Mr. Dwight Shelton, Ms. Kayla Smith, Mr. Jon Clark Teglas, Ms. Tracy Vosburgh, Ms. Logan Wallace, Dr. Lisa Wilkes, Dr. Sherwood Wilson, Mr. Chris Yianilos, faculty, staff, students, guests, and reporters.

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There was no public comment period.

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Rector Treacy welcomed everyone to the Board meeting.

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APPROVAL/ACCEPTANCE OF THE CONSENT AGENDA OPEN ITEMS*
(Refer to Attachments A through T)

[*Note: Items on the consent agenda are matters of importance that have been reviewed carefully by members of the board in preparation for the meeting but have been determined not to require discussion by the board or its committees.]

Rector Treacy asked for a motion to approve/accept the consent agenda open session items as listed. The motion was made by Mr. Mills, seconded by Ms. Harris, and approved unanimously.

- **Minutes of the Board of Visitors Meeting held March 26, 2018**
- **Report of the Academic, Research, and Student Affairs Committee (6/4/18) – Attachment A**
- **Report of the Buildings and Grounds Committee (6/4/18) – Attachment B**
- **Report of the Compliance, Audit, and Risk Committee (6/3/18) – Attachment C**
- **Report of the Finance and Resource Management Committee (6/4/18) – Attachment D**
- **Report of the Governance and Administration Committee (6/3/18) – Attachment E**
- **Report of Information Session—Attachment U**

From the Academic, Research, and Student Affairs Committee Consent Agenda and the Finance and Resource Management Committee Consent Agenda:

- **Resolution to Approve the 2018-19 Pratt Fund Budgets – Attachment F**

  That the proposed 2018-19 allocation and use of Pratt Funds be approved.

From the Academic, Research, and Student Affairs Committee Consent Agenda:

- **Resolution to Discontinue the Bachelor of Science Degree in Environmental Policy and Planning—Attachment G**

  That discontinuing the bachelor of science degree in environmental policy and planning be approved effective fall 2021.

- **Resolution to Adopt the Virginia Tech Carilion School of Medicine Student Honor Code, Attributes of Professionalism, and Teacher-Learner Compact—Attachment H**

  That the Board of Visitors adopt the Virginia Tech Carilion School of Medicine Honor Code, Attributes of Professionalism, and Teacher-Learner Compact.

- **Resolution to Revise the Graduate Honor System Constitution—Attachment I**

  That the Board of Visitors approve the Revision of the Graduate Honor System Constitution.

- **Resolution to Approve Faculty Handbook Clarifying Language on the Research Faculty Promotion Process—Attachment J**

  That the Resolution to Clarify Faculty Handbook Language on the Research Faculty Promotion Process be approved.

- **Resolution to Faculty Handbook Clarifying Language on Overload Compensation for Research Faculty Members Teaching Credit Classes—Attachment K**

  That the Resolution to Clarify Faculty Handbook Language on Overload Compensation for Research Faculty Members Teaching Credit Classes be approved.

- **Resolution to Approve Faculty Handbook Clarifying Language on Removal Processes for Research Faculty Members—Attachment L**

  That the Resolution to Clarify Faculty Handbook Language on Removal Processes for Research Faculty Members be approved.

- **Resolution to Revise University Policies Regarding Textbooks and Create Guidelines for Open Educational Resources to Comply with Amended Code of Virginia §23.1-1308—Attachment M**

  That the Board of Visitors approve the resolution regarding textbooks and open educational materials.

- **Resolution to Approve New and Revised Language in Faculty Handbook Regarding Alumni Distinguished Professors—Attachment N**

  That the Board of Visitors approve the new and revised language in the Faculty Handbook regarding alumni distinguished professors.

From the Buildings and Grounds Committee Consent Agenda:

- **Resolution to Approve an Ingress and Egress Easement to the New River Valley Regional Water Authority – Attachment O**

  That this resolution authorizing the Vice President for Operations to execute a non-exclusive easement for ingress and egress to the New River Valley Regional Water Authority be approved.

- **Resolution to Approve the Appointment to the New River Valley Regional Water Authority—Attachment P**

  That this resolution appointing William R. Knocke as joint representative to the New River Valley Regional Water Authority through June 30, 2022, be approved.

From the Finance and Resource Management Committee Consent Agenda:

- **Resolution to Approve the 2018-19 Hotel Roanoke Conference Center Commission Budget – Attachment Q**

  That the budget for The Hotel Roanoke Conference Center Commission for 2018-2019 be approved.

- **Resolution to Approve the 2018-19 Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences Budget—Attachment R**

  That the 2018-2019 budget for the Virginia Tech-Wake Forest School of Biomedical Engineering and Sciences be approved.

- **Resolution to Reappoint the University Representative to the Hotel Roanoke Conference Center Commission—Attachment S**

  That this resolution to appoint the Vice President for Outreach and International Affairs as the university's representative on the Hotel Roanoke Conference Center Commission be approved.

Consent agenda information item; no Board of Visitors action required:

- **Report of Research and Development Disclosures – Attachment T**

(Copies of consent agenda items are filed with the permanent minutes and marked as noted above.)

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REPORT OF THE ACADEMIC, RESEARCH, AND STUDENT AFFAIRS COMMITTEE

Rector Treacy called on Ms. Petrine for the report of the Academic, Research, and Student Affairs Committee.

As part of the Academic, Research, and Student Affairs Committee report, approval of the following resolution was moved by Ms. Petrine, seconded by Ms. Long, and approved unanimously.

Resolution to Approve a New Degree:
Bachelor of Arts in Science, Technology and Society

That this resolution recommending the establishment of the bachelor of arts in science, technology, and society be approved. (Copy filed with the permanent minutes and marked Attachment V.)

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As part of the Academic, Research, and Student Affairs Committee report, approval of the following resolution was moved by Ms. Petrine, seconded by Ms. Long, and approved unanimously.

Resolution to Approve a New Degree:
Bachelor of Science in Science, Technology and Society

That this resolution recommending the establishment of the bachelor of science in science, technology, and society be approved. (Copy filed with the permanent minutes and marked Attachment W.)

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REPORT OF THE BUILDINGS AND GROUNDS COMMITTEE

Rector Treacy called on Mr. Quillen for the report of the Buildings and Grounds Committee.

As part of the Buildings and Grounds Committee report, approval of the following resolution was moved by Mr. Quillen, seconded by Mr. Sanghani, and approved unanimously.

Resolution to Approve Agreement to Amend the Articles of Incorporation of the Montgomery Regional Solid Waste Authority and to Extend Term of User Agreement Between the Authority and the University

That this resolution authorizing the Vice President for Operations to execute the User Agreement and to execute and file the Articles of Incorporation Amendment for the Montgomery Regional Solid Waste Authority be approved. (Copy filed with the permanent minutes and marked Attachment X.)

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As part of the Buildings and Grounds Committee report, approval of the following resolution was moved by Mr. Quillen, seconded by Ms. Harris, and approved unanimously.

Resolution to Approve Appointments to the Montgomery Regional Solid Waste Authority

That this resolution recommending that Al Bowman be reappointed as joint representative and that the Chief Facilities Officer be reappointed as the university's representative to the Montgomery Regional Solid Waste Authority Board of Directors be approved. (Copy filed with the permanent minutes and marked Attachment Y.)

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REPORT OF THE COMPLIANCE, AUDIT, AND RISK COMMITTEE

Rector Treacy called on Mr. Kazmi for the report of the Compliance, Audit, and Risk Committee.

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REPORT OF THE FINANCE AND RESOURCE MANAGEMENT COMMITTEE

Rector Treacy called on Mr. Valeiras for the report of the Finance and Resource Management Committee.

As part of the Finance and Resource Management Committee report, approval of the following resolution was moved by Mr. Valeiras, seconded by Ms. Harris, and approved unanimously.

Resolution to Approve Report and Recommendation Regarding Quasi-Endowments

That this resolution reaffirming or designating as quasi-endowments the funds listed on Attachment A of the resolution be approved.

Reaffirm:
- Pratt Fund, funded by Estate of John L. Pratt

Designate:
- Donaldson Brown, funded by Donaldson Brown Gift
- Nationwide, funded by Medical Insurance Settlement from Nationwide
- Student Health Insurance, funded by Trigon Stock Conversion Settlement
- Gloria Smith Professorship, funded by Athletics Sugar Bowl Proceeds
- Multicultural Affairs, funded by Athletics Sugar Bowl Proceeds
- Chinese Geosciences, funded by People's Republic of China
- Licensing and Trademark, funded by University Licensing & Trademark Agreements

(Copy filed with the permanent minutes and marked Attachment Z.)

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As part of the Finance and Resource Management Committee report, approval of the following resolution was moved by Mr. Valeiras, seconded by Ms. Harris, and approved unanimously.

Resolution to Approve University Lines of Credit

That this resolution identifying the authorized officers; approving the terms of the proposals and the form of the credit agreement; and authorizing the authorized officers to enter into extensions of and amendments to the lines of credit and new lines of credit so long as such extensions and amendments and new lines of credit are consistent with the intent of this resolution and do not exceed the greater of $200 million or 45 days of operating expenditures, be approved. (Copy filed with the permanent minutes and marked Attachment AA.)

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As part of the Finance and Resource Management Committee report, approval of the following resolution was moved by Mr. Valeiras, seconded by Ms. Long, and approved unanimously.

Resolution to Approve the 2018-19 Faculty Compensation Plan

That the proposed 2018-19 Faculty Compensation Plan be approved.
(Copy filed with the permanent minutes and marked Attachment BB.)

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As part of the Finance and Audit Committee report, approval of the following resolutions as a group was moved by Mr. Valeiras, seconded by Ms. Petrine, and approved unanimously.

Resolution to Approve the 2018-19 Auxiliary Systems Budgets

a. Dormitory and Dining Hall System Budget

b. Electric Service System Budget

c. University Services System Budget

d. Athletic Facilities System Budget

That the recommended budgets for fiscal year July 1, 2018, to June 30, 2019, for the operation of the Athletic Facility System, Dormitory and Dining Hall System, Electric Service Utility System, and the University Services System be approved.

(Copies filed with the permanent minutes and marked Attachment CC.)

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As part of the Finance and Audit Committee report, approval of the following resolution was moved by Mr. Valeiras, seconded by Ms. Harris, and approved unanimously.

Resolution to Approve the 2018-19 University Budget: Operating and Capital

That the proposed 2018-19 operating and capital budgets as displayed on Schedules 1, 2, and 3 of this resolution be approved.

(Copies filed with the permanent minutes and marked Attachment DD.)

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As part of the Finance and Resource Management Committee report, approval of the following resolution was moved by Mr. Valeiras, seconded by Ms. Harris, and approved unanimously.

Resolution to Approve the Year-to-Date Financial Performance Report (July 1, 2017 – March 31, 2018)

That that report of income and expenditures for the University Division and the Cooperative Extension/Agricultural Experiment Station Division for the period of July 1, 2017, through March 31, 2018, and the Capital Outlay report be approved. (Copy filed with the permanent minutes and marked Attachment EE.)

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As part of the Finance and Resource Management Committee report by Mr. Valeiras and with the endorsement of the Buildings and Grounds Committee, approval of the following resolution was moved by Mr. Valeiras, seconded by Mr. Quillen, and approved unanimously.

Resolution to Approve the Capital Project for Planning the Slusher Hall Replacement

That the resolution authorizing Virginia Tech to plan the Slusher Hall replacement project be approved. (Copy filed with the permanent minutes and marked Attachment FF.)

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As part of the Finance and Resource Management Committee report by Mr. Valeiras and with the endorsement of the Buildings and Grounds Committee, approval of the following resolution was moved by Mr. Valeiras, seconded by Mr. Quillen, and approved unanimously.

Resolution to Approve the Capital Project to Supplement and Complete the Dietrick First Floor and Plaza Renovation

That the resolution authorizing Virginia Tech to supplement and complete the Dietrick First Floor and Plaza Renovation project be approved. (Copy filed with the permanent minutes and marked Attachment GG.)

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REPORT OF THE GOVERNANCE AND ADMINISTRATION COMMITTEE

Rector Treacy called on Mr. Sanghani for the report of the Governance and Administration Committee.

At the conclusion of Mr. Sanghani's report, Mr. Treacy requested that future updates to the Strategic/Continuous Planning process (currently provided by Dr. Pratt-Clarke to the full Board at the Sunday information session) be provided to the Governance and Administration Committee.

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PRESIDENT'S REPORT

A copy of **President Sands' remarks to the Board of Visitors** is filed with the permanent minutes and marked Attachment HH.

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Constituent Reports (no action required)
(Presented at BOV Information Session on June 3, 2018)

PowerPoint presentation by the Undergraduate Student Representative to the Board – Mr. Seyi Olusina
Written reports provided by the:
Graduate Student Representative to the Board – Mr. Brett Netto
Staff Representative to the Board – Mr. Robert Sebek
Faculty Representative to the Board – Dr. Hans Robinson

(Copies filed with the permanent minutes and marked Attachment II.)

Rector Treacy presented certificates of appreciation to Dr. Robinson, Mr. Netto, and Mr. Olusina. Mr. Sebek was re-elected as president of the Staff Senate and will be returning next year to serve an additional year as Staff Representative to the Board.

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Motion to Begin Closed Session

Ms. Petrine moved that the Board convene in a closed meeting, pursuant to § 2.2-3711, Code of Virginia, as amended, for the purposes of discussing:

1. Appointment of faculty to Emeritus status, the consideration of individual salaries of faculty, consideration of Endowed Professors, review of departments where specific individuals' performance will be discussed, and consideration of personnel changes including appointments, resignations, tenure, and salary adjustments of specific employees and faculty leave approvals;
2. The status of current litigation and briefing on actual or probable litigation;
3. Special Awards,

all pursuant to the following subparts of 2.2-3711 (A), Code of Virginia, as amended, .1, .7, and .10. The motion was seconded by Mr. Valeiras and passed unanimously.

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LITIGATION REPORT

Rector Treacy called on Ms. Heidbreder for the litigation report. No Board action is required.

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Motion to Return to Open Session

Following the Closed Session, members of the media, students, and the public were invited to return to the meeting. Rector Treacy called the meeting to order and asked Ms. Petrine to make the motion to return to open session. Ms. Petrine made the following motion:

> **WHEREAS**, the Board of Visitors of Virginia Polytechnic Institute and State University has convened a closed meeting on this date pursuant to an affirmative recorded vote and in accordance with the provision of The Virginia Freedom of Information Act; and
>
> **WHEREAS**, Section 2.2-3712 of the Code of Virginia requires a certification by the Board of Visitors that such closed meeting was conducted in conformity with Virginia law;
>
> **NOW, THEREFORE, BE IT RESOLVED** that the Board of Visitors of Virginia Polytechnic Institute and State University hereby certifies that, to the best of each member's knowledge: (i) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the closed meeting to which this certification resolution applies, and (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed, or considered by the Board of Visitors.

The motion was seconded by Mr. Mills and passed unanimously.

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APPROVAL/ACCEPTANCE OF CONSENT AGENDA CLOSED SESSION ITEMS*
(Refer to Attachments JJ through MM)

[*Note: Items on the consent agenda are matters of importance that have been reviewed carefully by members of the Board in preparation for the meeting and have been determined not to require discussion by the Board or its committees.]

Rector Treacy asked for a motion to approve/accept the consent agenda items that were considered in closed session, as listed. The motion was made by Ms. Petrine, seconded by Ms. Long, and approved unanimously.

- **Resolutions for Approval of Emeritus Status (4) –** Attachment JJ

- **Resolution for Approval of Endowed Chairs, Professorships, and Fellowships (1) –** Attachment KK

- **Resolutions for Approval of the Exception to the Virginia Conflicts of Interest Act (2)—**Attachment LL

- **Resolution for Approval of Faculty Leave Request (1) –** Attachment MM

(Copies of consent agenda items are filed with the permanent minutes and marked as noted above.)

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Upon motion by Mr. Valeiras and second by Mr. Kazmi, unanimous approval was given to the resolution for ratification of the **Personnel Changes Report** as amended and considered in Closed Session, which included the extension of President Sands' contract through 2024. This item was reviewed by the Finance and Resource Management and the Academic, Research, and Student Affairs Committees. (Copy filed with the permanent minutes and marked Attachment NN.)

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Upon motion by Mr. Valeiras and second by Mr. Kazmi, unanimous approval was given to the resolution for approval of the **2018-19 Promotion, Tenure, and Continued Appointment Program (125)** as considered in Closed Session. This item was reviewed by the Finance and Resource Management and the Academic, Research, and Student Affairs Committees. (Copy filed with the permanent minutes and marked Attachment OO.)

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Upon motion by Mr. Valeiras and second by Mr. Quillen, unanimous approval was given to the resolution to **Name a University Facility (1)** as considered in Closed Session. (Copy filed with the permanent minutes and marked Attachment PP.)

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Upon motion by Mr. Valeiras and second by Mr. Kazmi, unanimous approval was given to the resolutions of **Special Recognition (2)** for the retiring presidents of the University of Virginia (Teresa Sullivan) and the College of William and Mary (Taylor Reveley, III) as considered in Closed Session. (Copies filed with the permanent minutes and marked Attachment QQ.)

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REPORT ON THE INTEGRATION OF THE VIRGINIA TECH CARILION SCHOOL OF MEDICINE INTO VIRGINIA TECH

The Rector called on Ms. Petrine for a report on the Medical School Integration. She serves as the BOV liaison to the Medical School Integration Steering Committee and provided the following update:

- Integration workshops continue to address successfully all the details associated with integration of the school of medicine.
- Agreements related to the integration of the school have been approved by all bodies.
- All employees who were supposed to transfer to Virginia Tech will have done so as of June 10. The final transfer will be Dean Cynda Johnson, who will transfer to Virginia Tech on July 1.
- Personnel orientation and training on university systems and processes (e.g., procurement) is on schedule.
- Some VTCSOM processes will continue with Carilion Clinic and Jefferson College and will be phased into Virginia Tech over the coming year. These processes include: Blackboard educational management system, library consortium, and building security. Some information technology processes will also be a dual responsibility for the foreseeable future.
- Review of contracts is being done by legal counsel.
- On-going communications continue with the two accrediting bodies: SACSCOC and the LCME; materials are being prepared for submission to each body in advance of their respective site visits.
- On-going communication with SCHEV continues.

- The search for a new dean is under way with a search committee that includes representation from Virginia Tech and Carilion Clinic. The search is chaired by Cyril Clarke, Provost, and Patrice Weiss, Chief Medical Officer for Carilion Clinic, and assisted by the executive search firm of Issacson Miller. The committee will review all applicants in mid-June and will identify eight to ten candidates to screen at confidential interviews. Based on these interviews, a short list of finalists will be identified; on-campus visits by the finalists will take place in August with the hope of having the new dean in place by January 1.

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Rector Treacy, along with President Sands, presented certificates of appreciation to the three representatives whose terms are ending: Seyi Olusina, Brett Netto, and Hans Robinson. Mr. Robert Sebek will continue next year as staff representative to the Board.

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Election of Officers for 2018-2019

Rector Treacy thanked Mike Quillen, Wayne Robinson, Mehul Sanghani, and Horacio Valeiras for their service on the Board as their terms come to an end. These members are all eligible for reappointment with the exception of Mr. Quillen, who has served two terms. Mr. Robert Mills will remain on the Board for an additional year in his ex-officio capacity as president of the Virginia Board of Agriculture and Consumer Services.

He then called on Ms. Petrine for a report of the Nominating Committee for officers of the Board. On behalf of the Nominating Committee, which Ms. Petrine chaired and which also included Mr. Kazmi and Ms. James, Ms. Petrine presented the following nominees:

Rector: Dennis Treacy
Vice Rector: Horacio Valeiras (contingent upon his reappointment by the Governor)
Secretary: Kim O'Rourke

Mr. Treacy then temporarily transferred chairmanship of the Board meeting to Ms. Petrine (the Vice Rector). Additional nominations were invited from the floor. There being no additional nominations, a motion was made to close nominations; the motion was seconded and passed. Ms. James made a motion for approval of the nominees presented. The motion was seconded by Mr. Mills and passed.

Ms. Petrine then returned the chairmanship of the Board meeting to Mr. Treacy.

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Rector Treacy appointed Ms. Harris and Ms. James to serve on a planning committee for the Board retreat with assistance from Kim O'Rourke. The retreat will be held on the Saturday preceding the upcoming August Board meeting.

Rector Treacy also appointed Mr. Hill as the Board liaison to the campus Master Plan team to continue the work that Mr. Quillen has been doing for quite some time.

Rector Treacy announced that the Task Force on Board Structure and Governance will meet again sometime this summer before the August meeting to conduct another assessment of the new committee structure. Members of the Task Force are Ms. Petrine (chair), Ms. Harris, Mr. Sanghani, Mr. Valeiras, Ms. Heidbreder, and Ms. O'Rourke. He asked the Board to provide feedback to any of the Task Force members.

Rector Treacy has asked Mr. Sanghani and the Governance and Administration Committee to review the selection process and governance of the student representatives and report those findings back to the Task Force. The Board will hear recommendations from the Task Force, if any, at the August meeting.

Rector Treacy concluded that the Board is very pleased with the progress of Virginia Tech. The Board is excited about the president's vision and 100 percent committed to ensuring its success. The Board fully supports the President and is especially pleased with the president's integrity and communication with this Board and all community stakeholders. Accordingly, the Board had voted unanimously in closed session as part of the Personnel Changes Report to extend the contract of President Sands through 2024. [Note: This action was ratified in open session.]

President Sands said it had been a real honor to be able to serve this institution for the past four years. He has high hopes for the future of the university and thanked the Board for their trust in allowing him to serve this university, which he takes very seriously. He described the university as a gem not only in Virginia but for the country as a whole. He looks forward to making the Board proud of this era of Virginia Tech.

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Upon a motion by Mr. Hill and second by Ms. Harris, the meeting adjourned at 3:25 p.m.

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The date of the next regular meeting is August 26-27, 2018, location to be determined.

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Dennis H. Treacy, Rector

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Kim O'Rourke, Secretary

Minutes

ACADEMIC, RESEARCH, AND STUDENT AFFAIRS COMMITTEE

New Classroom Building, Room 120
9:00 – 11:30 a.m.
Monday, June 4, 2018

Committee Members

Debbie Petrine, chair, Tish Long, Brett Netto (graduate student representative), Chris Peterson, Hans Robinson (faculty representative), Wayne Robinson, Rector Dennis Treacy.

Guests

Zo Amani, Tommy Amal, Beth Armstrong, Rosemary Blieszner, Tom Bluestein, Daniel Breslau, Tom Brown, Lori Buchanan, Kris Bush, Steve Capaldo, D'Elia Chandler, Cyril Clarke, Juan Espinoza, Jack Finney, Rachel Gabriele, Guru Ghosh, Cathy Grimes, David Guerin, Kristina Hartman, Lindsey Haugh, Luisa Havens-Gerardo, Lee Hawthorne, Kay Heidbreder, Rachel Holloway, Elizabeth Hooper, Byron Hughes, Rachel Iwicki, Adriane Keller, Frances Keene, Sharon Kurek, Rachel Iwicki, Chelsea Lyles, Curtis Mabry, Hud McClanahan, Christina McIntyre, Scot Midkiff, Mallory Miller, Sally Morton, April Myers, Kim O'Rourke, Patty Perillo, Ellen Plummer, Menah Pratt-Clarke, Julia Ross, Karen Eley Sanders, Timothy Sands, Brennan Shephard, Natasha Smith, Robert Sumichrast, Don Taylor, Pablo Tarazaga, Don Taylor, Judy Taylor, Rob Whitehead, Chris Wise.

1. Welcome and Acceptance of Agenda. D. Petrine, chair of the committee, welcomed committee members and guests. The committee reviewed the agenda and consent agenda. A request to move the presentation regarding enrollment management to later in the meeting was accepted and the committee approved the agenda.

2. Consent Agenda. The committee unanimously approved the consent agenda, including: March 26, 2018 meeting minutes, two reappointments to endowed chairs, professorships, or fellowships; the 2018-19 Pratt Fund Budgets (shared with the Finance and Resource Management Committee); the discontinuance of a degree in environmental policy and planning; adoption of the Virginia Tech Carilion School of Medicine Student Honor Code, Attributes of Professionalism, and Teacher-Learner Compact; revisions to the Graduate Honor System Constitution; resolutions clarifying language in the Faculty Handbook pertaining to research faculty on: promotion processes, overload compensation for teaching credit classes, and research faculty removal processes, and a resolution to revise language in the Faculty Handbook pertaining to the appointment of Alumni Distinguished Professors; a resolution to comply with amended Code of Virginia

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* Requires Full Board Approval

§23.1-1308 regarding textbooks and open educational resources; language for the Faculty Handbook pertaining to Alumni Distinguished Professors, and reviewed the Report of 2018-19 Faculty Compensation Plan (shared for information purposes, by the Finance and Resource Management Committee).

The consent agenda was approved unanimously.

3. Report of Closed Session Items. D. Petrine reported on the items approved by the committee in its closed session: four appointments to emeritus/a status; one appointment to an endowed chair, professorship, or fellowship; two exceptions to the Virginia Conflict of Interests Act; one faculty special leave request; promotions and tenure of 125 faculty members; and ratification of the faculty personnel changes report (shared with the Finance and Resource Management Committee), which will be addressed in the full board meeting closed meeting.

4. Provost's Update. C. Clarke, interim executive vice president and provost, provided updates on several items:

Beyond Boundaries and Foundational Initiatives: Virginia Tech continues to advance development and implementation of foundational initiatives arising from the Beyond Boundaries vision. These include a commitment to the VT-shaped model of discovery and learning that highlights the importance of disciplinary strength consistent with the university's comprehensive land grant mission; transdisciplinary areas of excellence represented by Destination Areas (DAs) and Strategic Growth Areas, the research institutes, Interdisciplinary Graduate Education Programs (IGEPs); and the university's commitment to community engagement and experiential learning (hands-on, minds-on). The university's commitment to advancing experiential learning remains high and is on the cusp of developing a university wide model to highlight this commitment.

Partnership for an Incentive Based Budget (PIBB). The university's budget model supports the implementation of Beyond Boundaries foundational initiatives and continues to be rolled out across the academic areas.

Destination Areas: The university is in the second year of implementing the Destination Areas and faculty recruitment is proceeding well through cluster hiring strategies, with only four of 54 positions not yet filled. The university anticipates additional new faculty lines for the next fiscal year. The provost's office and colleges use recruitment and hiring strategies designed to support and accomplish broad and diverse hires.

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* Requires Full Board Approval

Global Systems Science is an example of a DA that converges factors that affect public health, animal health (domestic and wild animals), and environmental health in rural environments, both in the US and internationally. Emerging programs include (1) rural environments in Appalachia and (2) ecology of disease in Botswana. When fully developed, an undergraduate student interested in the epidemiology of infectious diseases will enroll in new and existing undergraduate courses in Blacksburg that establish foundational knowledge regarding the principles of ecology, biostatistics and epidemiology, and transmission of infectious diseases. The student might then enroll in a summer session course offered in Kasane, Botswana that demonstrates these principles using real-life situations and conduct undergraduate research under the mentorship of faculty and graduate students working in the area of public and animal health, ecology, decision modeling, community service and policy development. The student would then come away with knowledge and skills relevant to these disciplines and a deep appreciation of the value of listening to and collaborating with rural communities in the spirit of Ut Prosim.

Faculty Retention: In response to a question raised during the committee's March meeting regarding the retention of faculty, the office of the provost collected data and will continue to analyze retention information to determine a more robust understanding of the university's retention needs. The university participates in the Collaborative On Academic Careers in Higher Education (COACHE) data collection efforts which provide Virginia Tech with information related to tenure track and tenured faculty. This fall, the university will expand its relationship with COACHE to include opportunities for participation in the COACHE-administered faculty retention and exit survey.

In 2016-17, 29 faculty left the university, representing 2% of the total faculty (in a range of 1% to 4% over a five-year period). In 2016-17, the university's loss of underrepresented and minority faculty was similar with a loss of 2% Black and 3% Hispanic faculty. Data interpretation should take into account small numbers and individuals who classify themselves as representing more than one race. In 2016-17, the losses of female and male faculty were 3% and 2%, respectively. While the loss of faculty may represent a small proportion of faculty, each loss has significant impact.

Faculty Retention Strategies: In 2017-18 there were 27 retention actions (these actions varied from 44 to 15 over five years). The cost of salary enhancement in 2017-18 was $133K (it varied from $310 to $88K over five years), with an average of $10K. Faculty retention strategies include additional matching salary enhancement funded at the college level in addition to faculty research packages.

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* Requires Full Board Approval

Faculty retention is a concern and low compositional representation across the university is the most important issue. The university and colleges employ many strategies to reach students who might complete graduate degrees and consider academic careers.

Virginia Tech Carilion School of Medicine (VTCSOM) integration. The university is on schedule for integration of the VTCSOM by July 1, 2018. Personnel have transferred to Virginia Tech and the Human Resources team, and Curtis Mabry are to be commended for achieving this complicated task. The university's application has been submitted to the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and the SACSCOC's decision regarding integration will be announced to the university on June 15, 2018.

Virginia Tech Research Center – Arlington (VTRC-Arlington). The university will be submitting for approval to the State Council of Higher Education for Virginia (SCHEV) approval for the Arlington (VTRC-Arlington) as a mixed-use, instructional and research facility. The Board of Visitors will be invited to approve a resolution to this effect in August, 2018.

5. Student Affairs – Living and Learning Communities. P. Perillo, vice president for student affairs introduced F. Keene, interim director of residence life. F. Keene updated the committee on the university's Living and Learning Communities (LLC). An LLC is a residential community organized around a common experience, course, interest, or goal including disciplinary interests (e.g. science), academic interests (e.g. global learning), or a residential college model. Students apply to participate and the community is led by a program director from academic or student affairs supported by residence life. LLCs currently serve 37% of on-campus undergraduate students. Student Affairs intends to continue to grow the percentage of students participating in LLCs and residential colleges.

6. Academic Affairs

A. New Degrees: Bachelor of Arts and Bachelor of Science in Science, Technology, and Society. R. Blieszner, dean of the College of Liberal Arts and Human Sciences, and D. Breslau, associate professor of science, technology, and science provided information regarding the new bachelor of arts and bachelor of science degrees in science, technology, and society. Completing the degree prepares graduates to identify ways in which science, medicine, and technology influence society. Graduates evaluate and formulate policies within science, technology, and medicine fields. STS graduates will be employed in public sectors such as

* Requires Full Board Approval

environmental research and advocacy, research analysis, and pursue graduate education in law, health, information science, and environmental policy.

The committee unanimously approved the two resolutions to establish the new degrees in science, technology, and society.

B. Enrollment Management Report. L. Havens-Gerardo, vice provost for enrollment management, offered the committee a report on enrollment management. Successful enrollment management includes evaluating capacity, budgeting, and setting enrollment goals. Actions are to set the university's offer rate, optimal yield, and a wait list strategy. In 2018 undergraduate applications were up across all categories and up 18.7% over 2017 (32,103). Admission benchmarks are on schedule to be met including underserved and underrepresented in and out-of-state students (in state up 2.8%, total of 1,534 and out-of-state is up 12.2%, total of 475). The freshman class profile includes 56% of students with a GPA over 4.0. First-Year Scholars across all categories are increasing. Summary and Next Steps: Enrollment target was set to 6,426 with an assumption of no more than 3% melt to achieve an entering cohort of 6,237 for Fall 2018. Strategic conversations and planning to start June and July this year to set enrollment goals for fall 2019. Strategic recruitment planning for the class of 2023 is already underway, focusing on accelerating 2022 goals and on optimizing strategies for veterans, corps, legacy and transfer populations. Redesigning the recruitment viewbook, communication plan and visitor experience are in progress. Implementing new admissions platforms and integrating non-cognitive factors in the admissions review process will be active next year. The scholarship platform Raise.me as been launched, focusing effort on all Virginia high schools with at least 70% free or reduced lunch enrollments.

The committee voted unanimously to accept the Enrollment Management Group report.

C. College Update: College of Engineering. Julia Ross, dean of the College of Engineering, provided an update on the college. The college benefits from the work of 222 staff employees, 367 tenure-track and tenured faculty members, 8,331 undergraduate students, and 2,227 graduate students. The college has a focus on experiential learning with a theme of "hands on minds on." The college ranks 8th in research expenditures and enjoyed a record-breaking year in gifts and philanthropy, a 69% increase over fiscal year 2016 for a total of $43.57M in new gifts and commitments. Commitments to inclusive excellence include the Center for the Enhancement of Engineering Diversity, a $5M gift creating a pathway for 60 first-generation students, and the New Horizon Graduate Scholars program.

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7. Council of College Deans Update. R. Sumichrast, dean of the Pamplin College of Business, and representative to the committee from the Council of College Deans, offered remarks to the committee. The deans continue to appreciate partnering with the new VT for Enrollment Management and her team to enroll a class that is on target for the university's desired size and characteristics. The enrollment team is a great help in planning our instructional, classroom, and other college needs. The deans continue to discuss the possible impact of a smaller freshman class on budget as the university's PIBB is implemented. The deans continue to discuss college collaborations in the National Capital Region and the university's participation in the state's Commonwealth Cybersecurity Initiative (CyberX) with Virginia Tech as the anchoring institution. Conversations continue regarding a funding model for professional master's programs. The college deans continue to participate exploring plans for academic space including space dedicated to CyberX. Deans have discussed ways in which to increase the numbers of underrepresented and minority faculty, for example the accounting firm KPMG has sponsored a Ph.D. Project to increase underrepresented and minority faculty in the business disciplines.

8. Agenda Items for August 2018 Committee Meeting **D. Petrine**

The committee discussed the possibility of updates on the university's international initiatives, graduate education, information on how the university uses peer and other benchmarks, and student services in distributed campus locations including Roanoke and the National Capital Region.

9. Adjourn

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* Requires Full Board Approval

Living & Learning

PATTY PERILLO
Vice President for Student Affairs
FRANCES KEENE
Interim Director, Housing and Residence Life

VIRGINIA TECH™

What is a Living-Learning Community (LLC)?

- Organized around a common experience, course, interest, and goal
- Students apply to participate
- Led by a program director from academic or student affairs and supported by residence life
- Peer mentorship

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The Virginia Tech Student Experience:
Virginia Tech's Next 20 Years

The Virginia Tech Student Experience Task Force Report | January 2015

2015 Task Force
Strategic Recommendation:

Grow living-learning and residential college programmatic initiatives to involve at least two-thirds of undergraduate residential students over the next decade by promoting benefits and reducing financial barriers (currently 37% of the undergraduate on-campus population, including the Corps of Cadets).

Discipline-Specific Model

- Focused on a specific area of study
- Multigenerational
- Led by a program director

CURIΣ
A Learning Community at Virginia Tech

DA VINCI
The Biological and Life Sciences Learning Community

GALILEO
ENGINEERING COMMUNITY

WOMEN LIVING, LEARNING, & WORKING • TOGETHER TO BECOME ENGINEERS •

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Academic/Interest Based Model

- Focused on a common interest or common course
- Multigenerational
- Led by a program director
- Coming in fall 2018: Ujima

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Residential College Model

- Interdisciplinary
- Multigenerational
- Led by a live-in faculty principal

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Summary

Living-Learning Communities:

- Benefit students academically and socially.
- Currently serve 37% of Virginia Tech's undergraduate, on-campus population
- Diverse identities represented in Living Learning Communities

Because of the rich experience LLCs offer, we seek to grow the living-learning and residential college initiatives to engage at least two-thirds of our undergraduate, residential population.

Annual Report of the Enrollment Management Group

ACADEMIC, RESEARCH AND STUDENT AFFAIRS COMMITTEE

June 4, 2018

In June of 2012, the Enrollment Management Group (EMG) was established to consider programs and practices associated with enrollment management. In addition to matters pertaining to financial aid, student success, and admissions, the EMG continues to annually review the progress of the university in achieving its diversity efforts through the continued narrowly-tailored consideration of race and ethnicity in admissions selections, and to make recommendations for incremental changes in practice, policy and funding that ensure the success of enrollment management. The results of the annual review of the Enrollment Management Group are shared annually with the Academic Affairs Committee of the Board of Visitors as an information item.

RECOMMENDATION:

That the Academic, Research, and Student Affairs Committee of the Board of Visitors accept the Annual Report of the Enrollment Management Group.

June 4, 2018

Undergraduate Enrollment Management Update
The Class of 2022

Luisa M. Havens Gerardo, Ph.D.
Vice Provost for Enrollment Management

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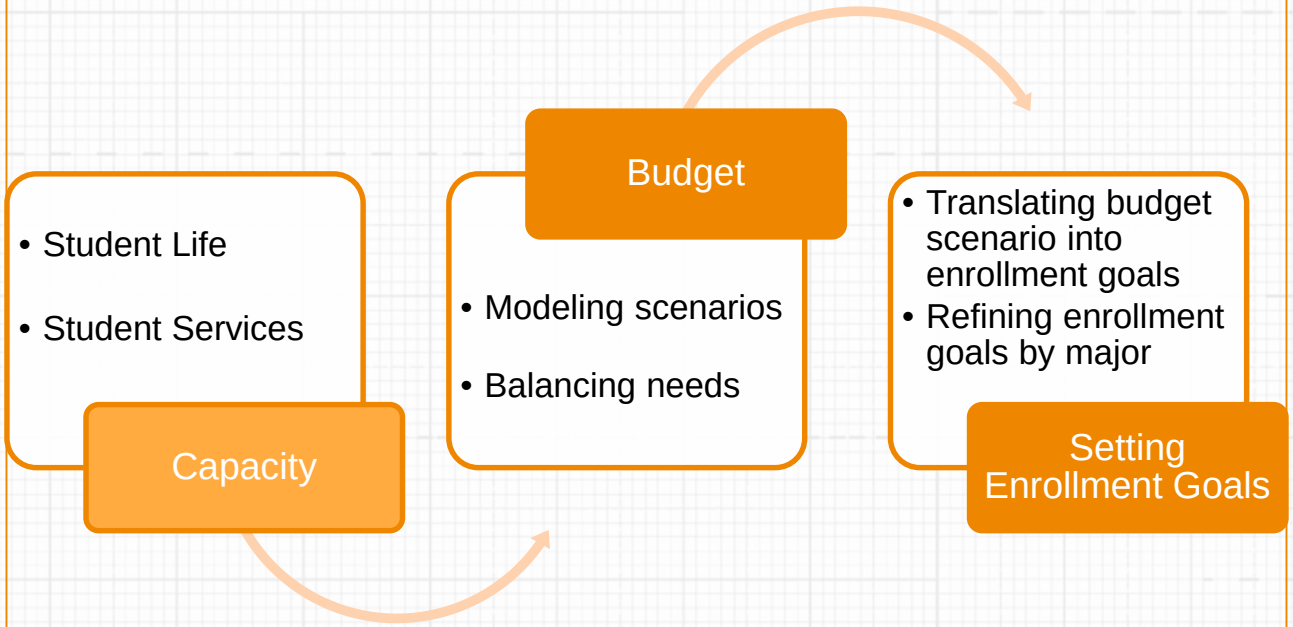
Strategic Conversations



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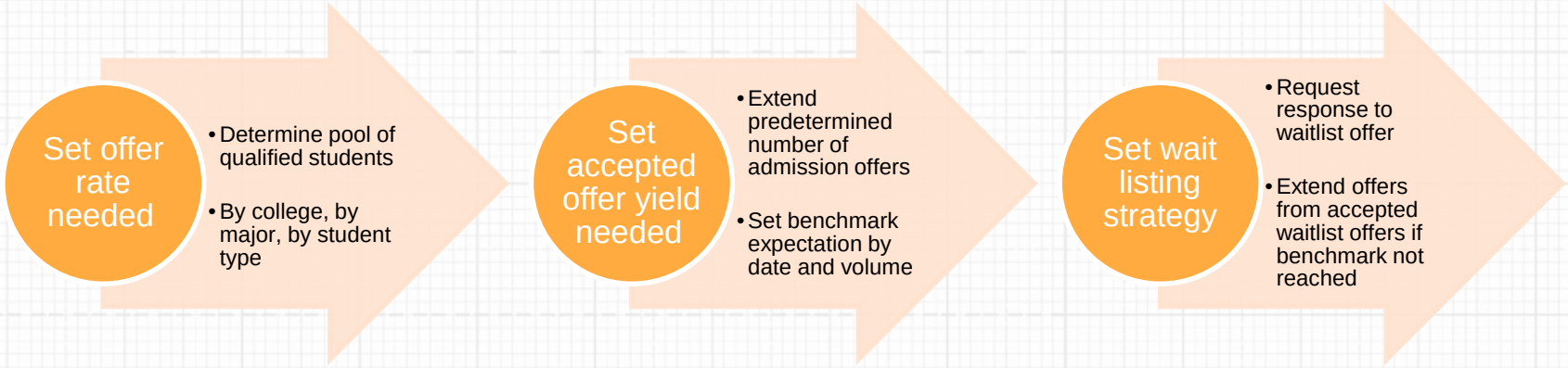
Action Planning



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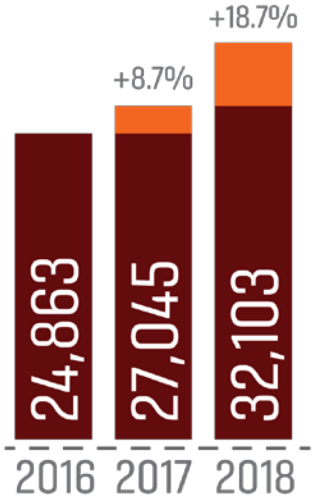
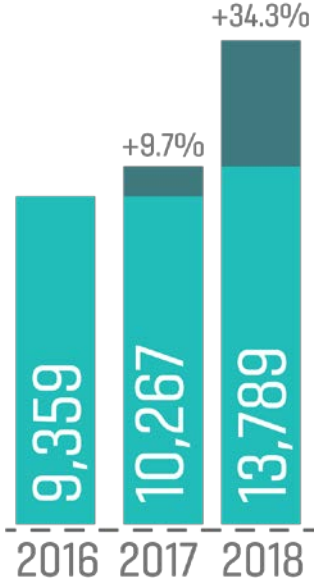
Historic UG Admissions Cycle: Applications Received

Total



In-State

Out-of-state



International

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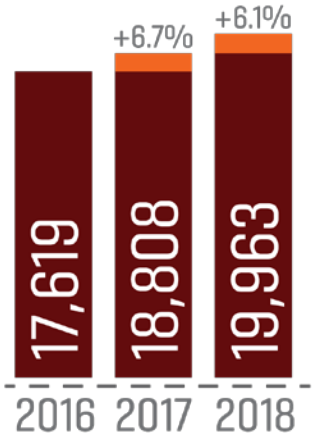
Historic UG Admissions Cycle: Offers extended

Total



In-State

Out-of-state

International

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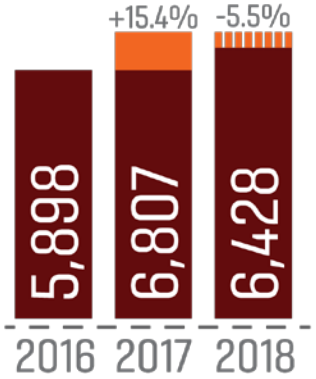
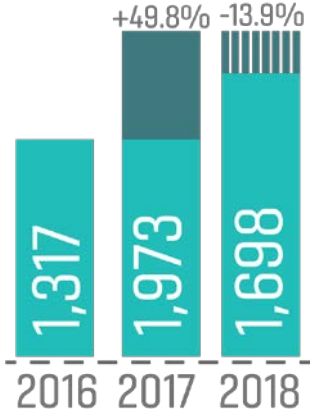
Historic UG Admissions Cycle: Offers accepted

Total



In-State

Out-of-state



International

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2018 Admissions Cycle Points to Note

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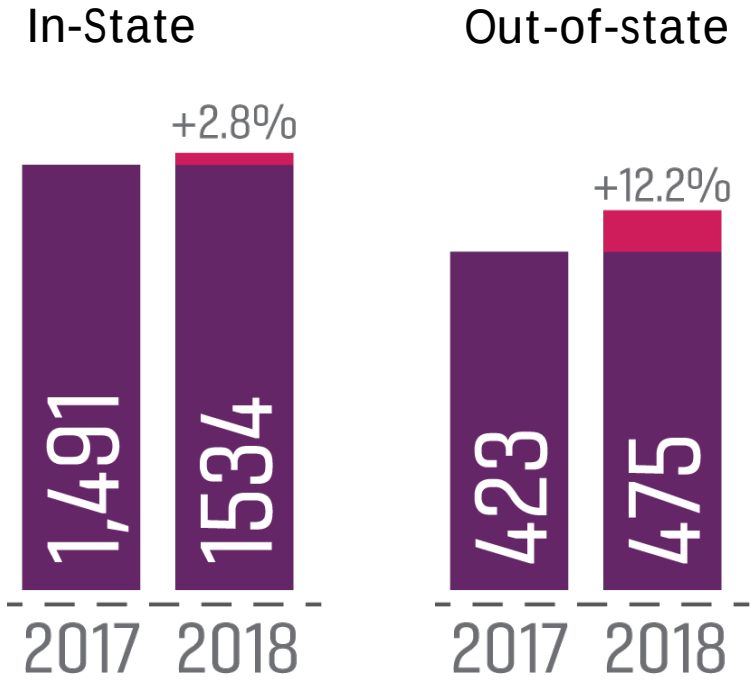
Diversity Benchmarks: Overall Underserved/ Underrepresented



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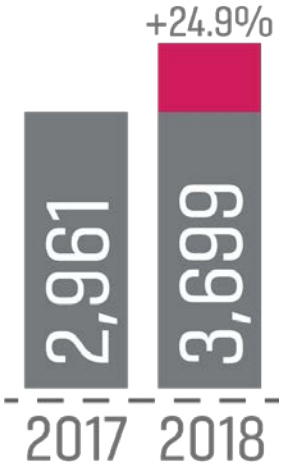
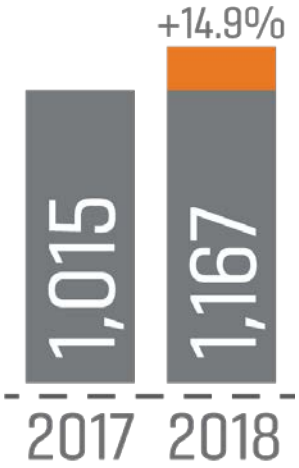
Diversity Benchmarks: Underrepresented

Applications

Offers



Accepted



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Students who identify as American Indian/ Alaska Native, African American, Hispanic, and two or more races as applicable.

Diversity Benchmarks: Underserved: First-Generation

Applications

Offers

Accepted

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Diversity Benchmarks:
Underserved: In-state, Pell Grant-Eligible

Applications

Offers

Accepted

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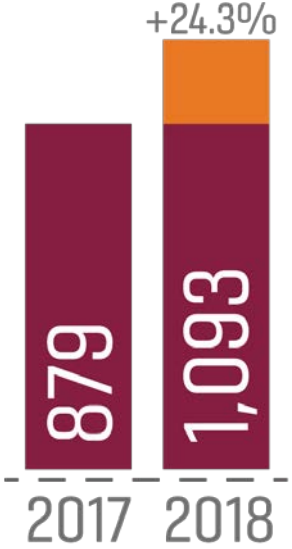
Diversity Benchmarks:
Underserved: Out-of-state, Pell Grant-Eligible

Applications



Offers

Accepted

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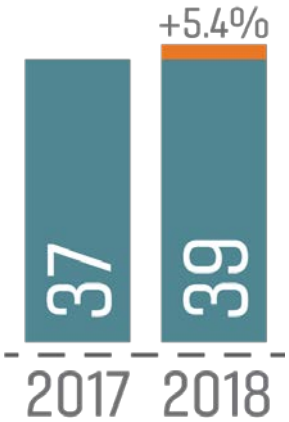
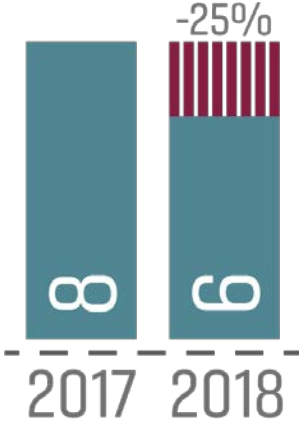
Diversity Benchmarks: Underserved: Veterans

Applications



Offers

Accepted



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Corps of Cadets

410	Total accepts	+ 13%
87	Female	+ 22%
71	First-Generation	+ 51%
55	Hispanic	+ 129%

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Legacy

Applications

Offers

Accepted

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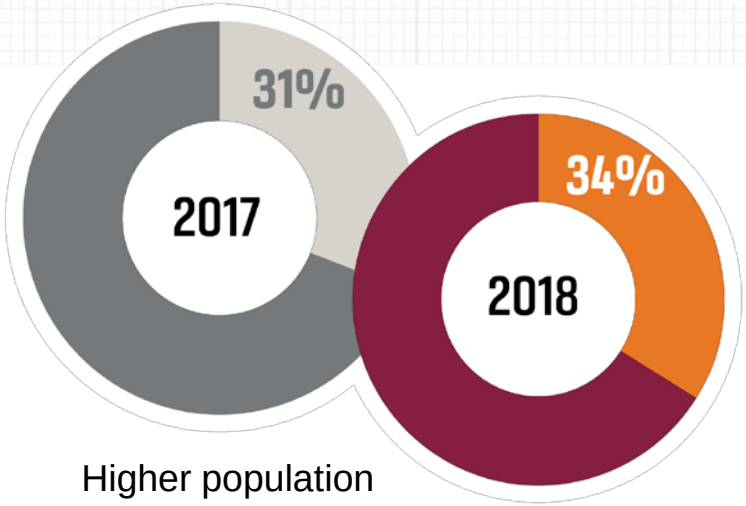
2018: Freshman Class Profile



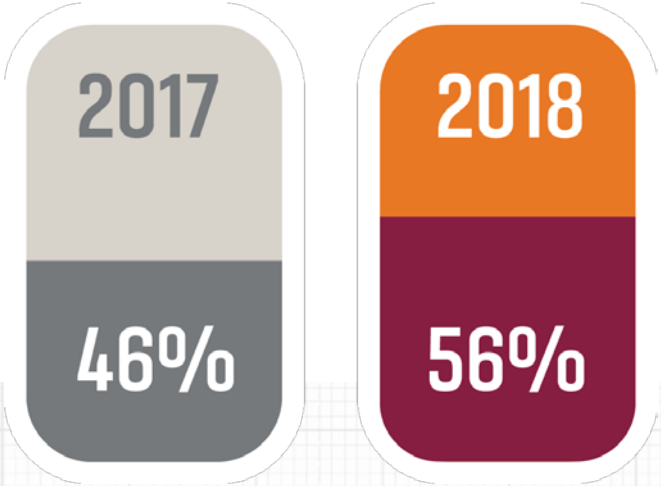
Higher population underrepresented / underserved vs. 2017

4.05 2018

Higher average GPA vs. 2017

4.0 2017

Higher percentage with GPA over 4.0



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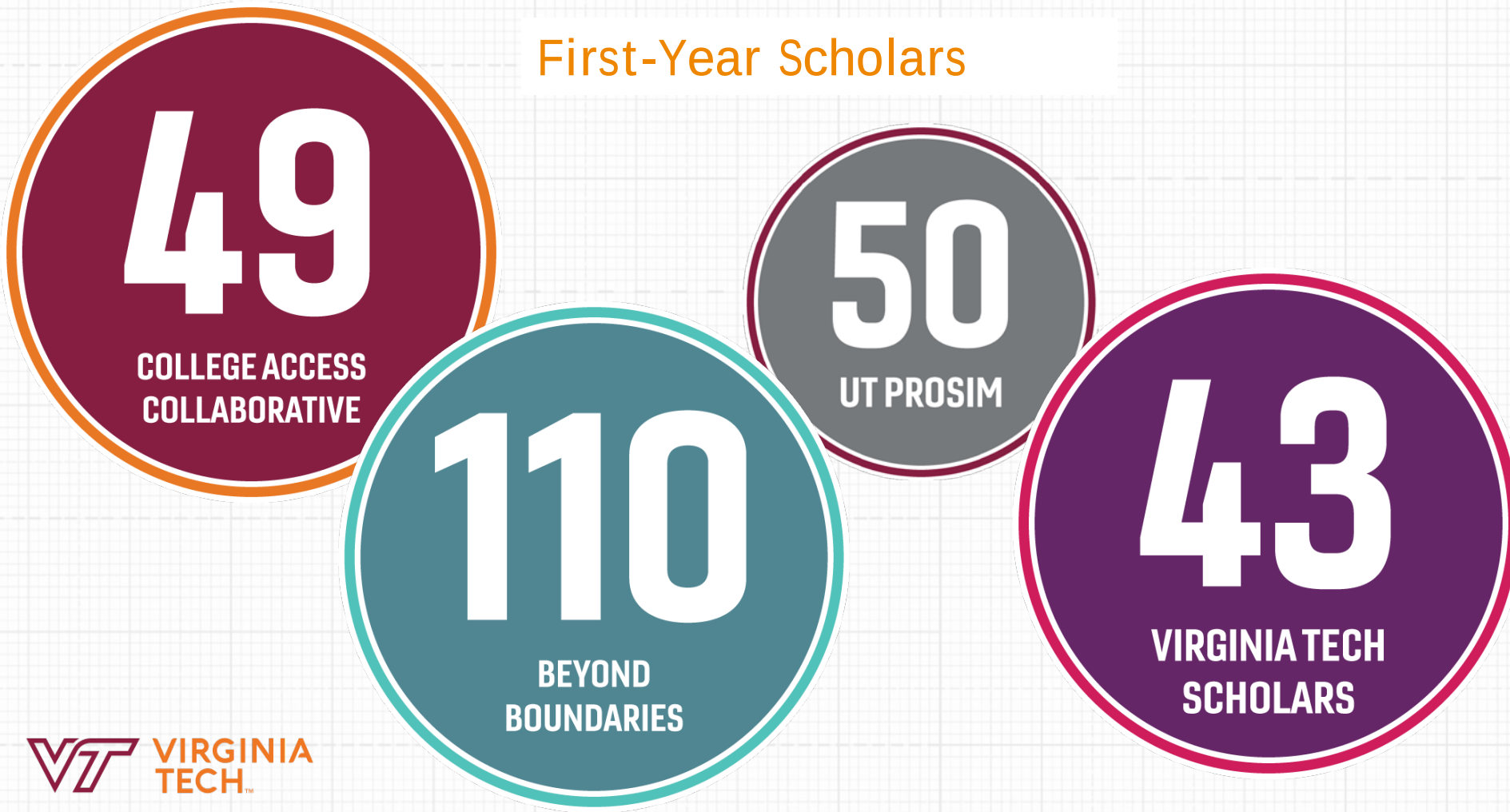
First-Year Scholars



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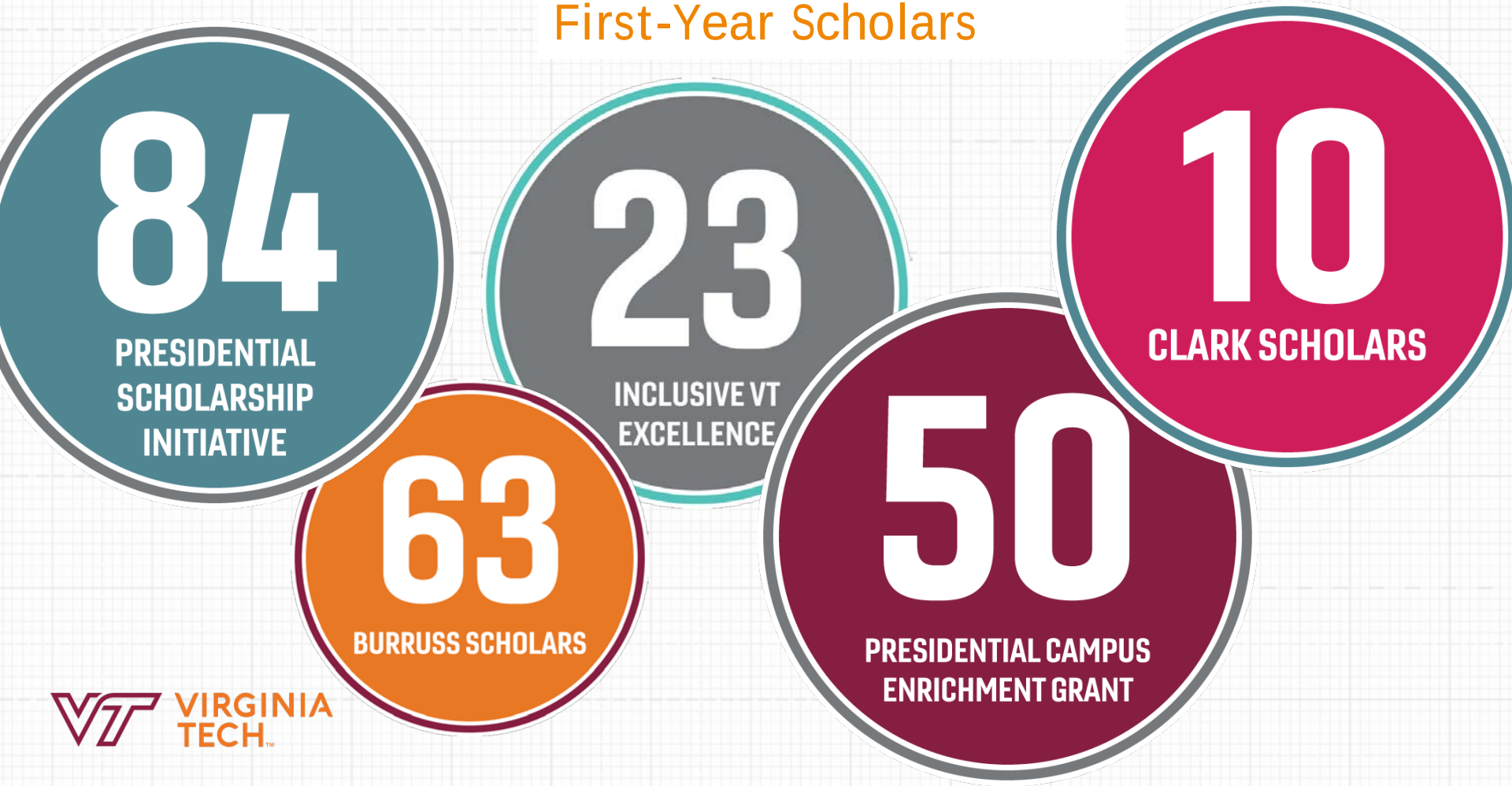
First-Year Scholars



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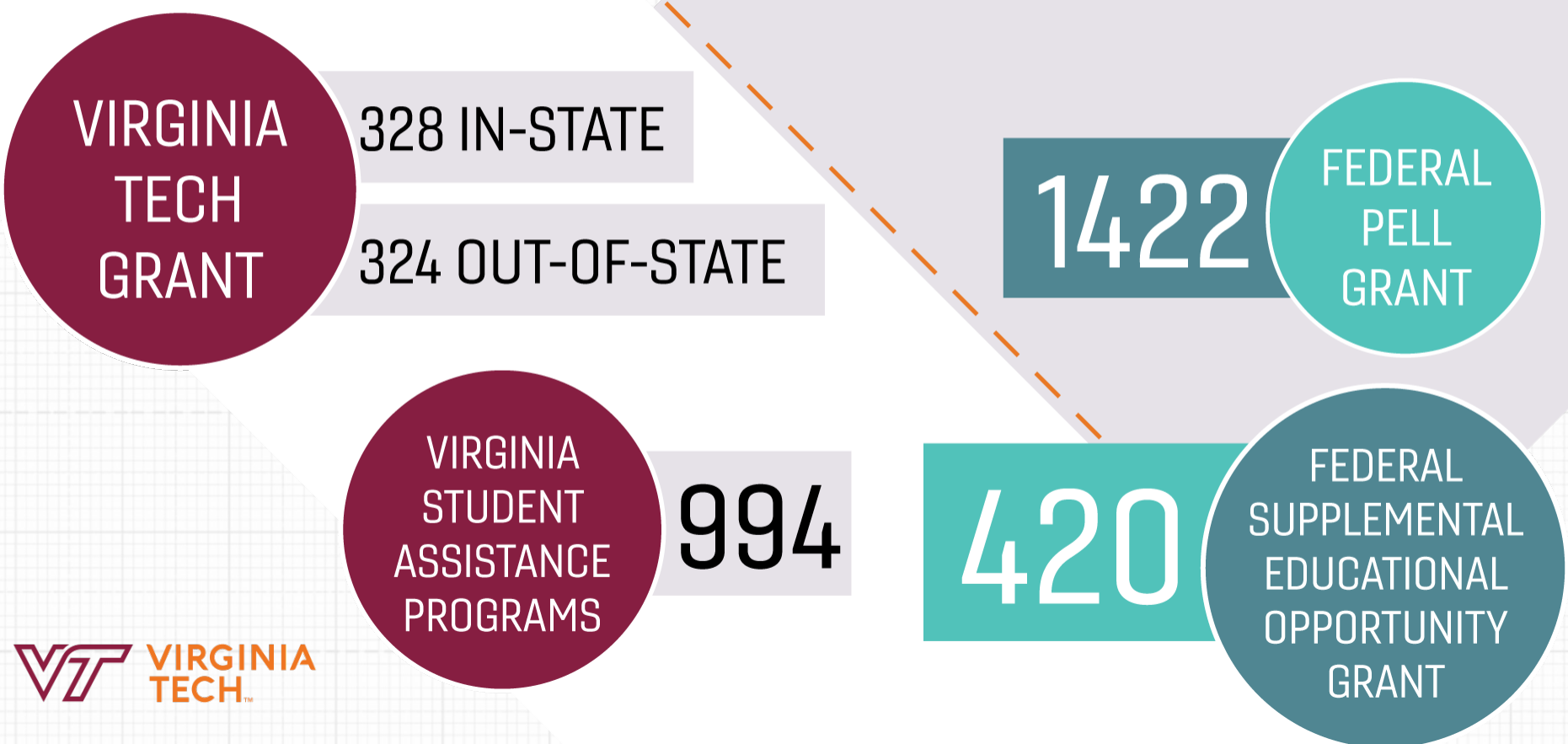
First-Year Scholars



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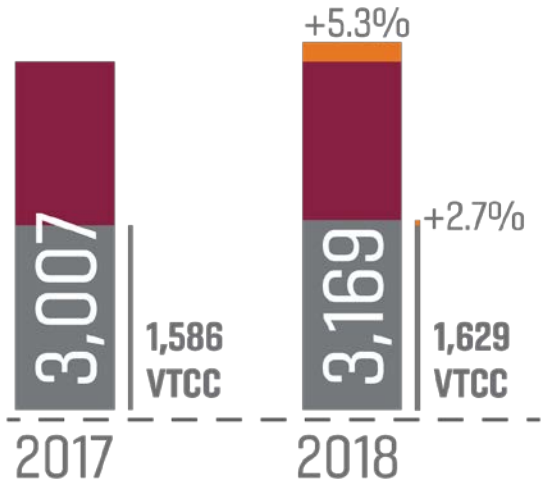
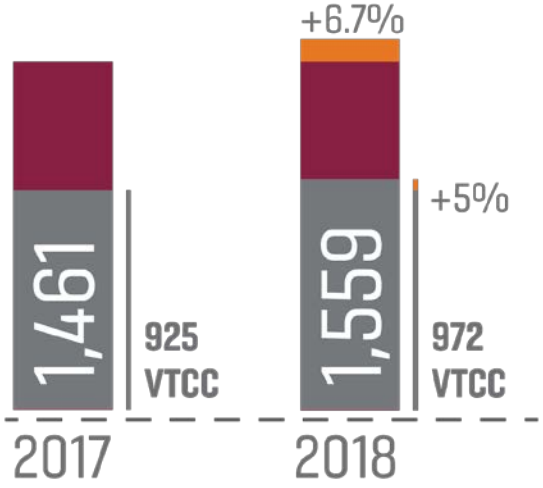
2018 Transfer Class

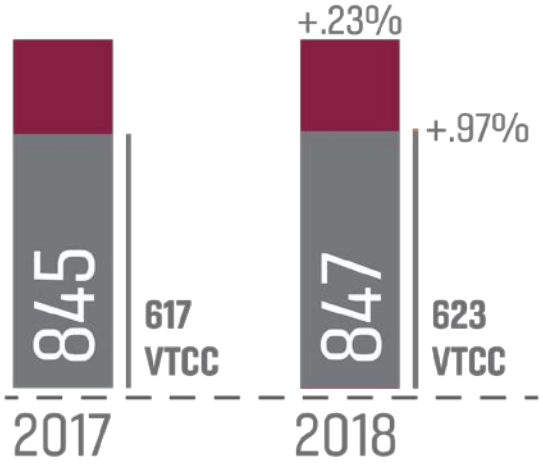
Applications



Offers



Accepted



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Summary and Next Steps

- Enrollment target was set to 6426 with an assumption of no more than 3% melt to achieve an entering cohort of 6237 for Fall 2018.
- Strategic conversations and planning to start June and July this year to set enrollment goals for fall 2019
- Strategic recruitment planning for the class of 2023 is already underway, focusing on accelerating 2022 goals and on optimizing strategies for veteran, corps, legacy and transfer populations.
- Redesigning the recruitment viewbook, communication plan and visitor experience
- Implementing new admissions platform and integrating non-cognitive factors in the admissions review process
- Finalizing the financial aid leveraging model this summer, for full implementation in fall 2018
- Launched the scholarship platform Raise.me, focusing effort on all Virginia high schools with at least 70% free or reduced lunch enrollments

COLLEGE OF ENGINEERING:

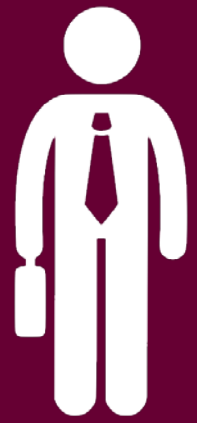
A COLLECTIVE VISION AND UPDATE

JULIA M. ROSS

Paul and Dorothea Torgersen Dean of Engineering

VIRGINIA TECH™

BY THE NUMBERS



222

Staff

367

Tenure/Tenure Track

8,331

Undergraduate Students

2,227

Graduate Students

*FY 2018 Student Enrollment based fall census

**FY 2018 Faculty Staff Numbers based on ASEE

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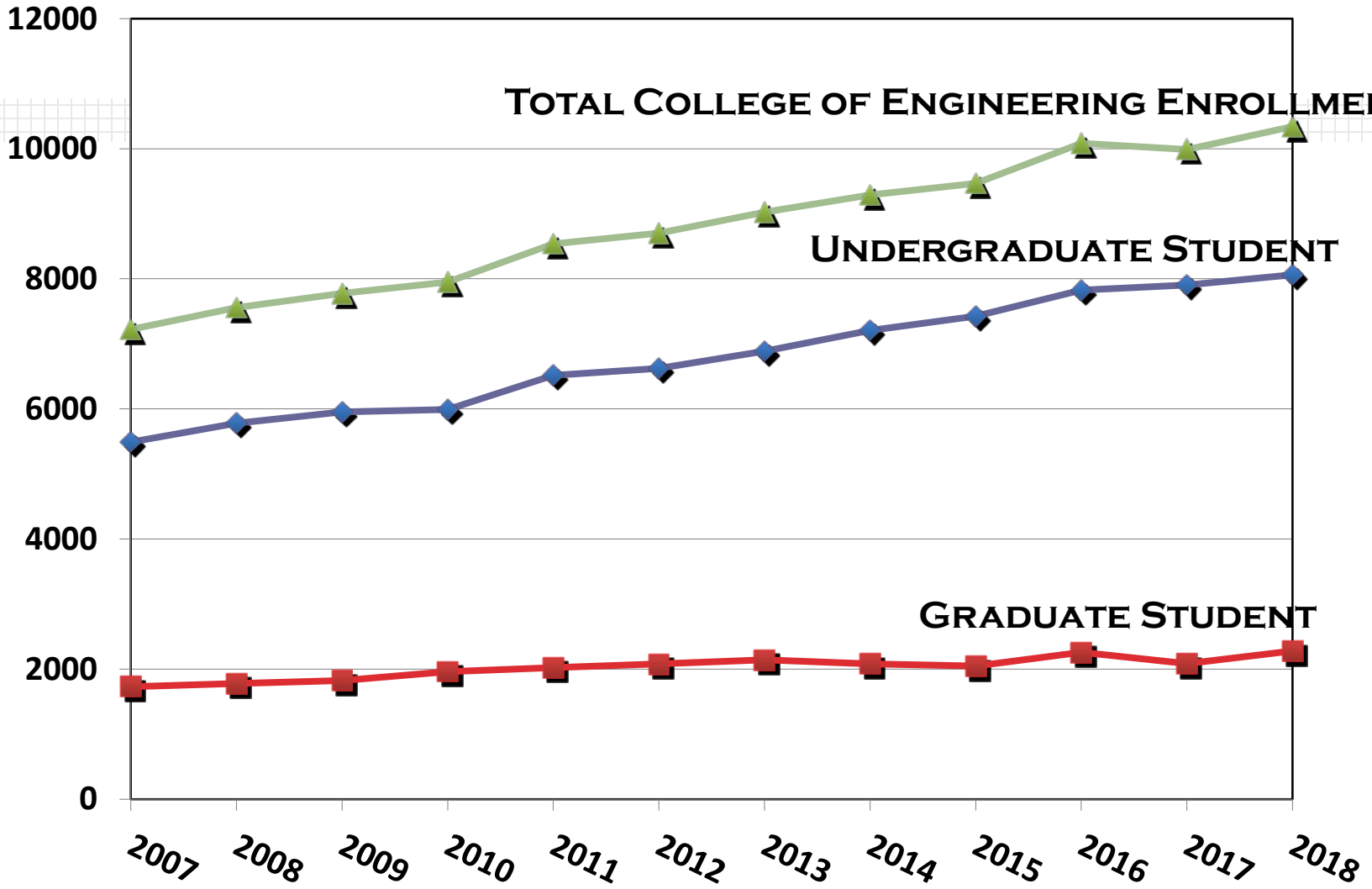
ENROLLMENT



STUDENT COUNT

FISCAL YEAR

*FY STUDENT ENROLLMENT BASED FALL CENSUS

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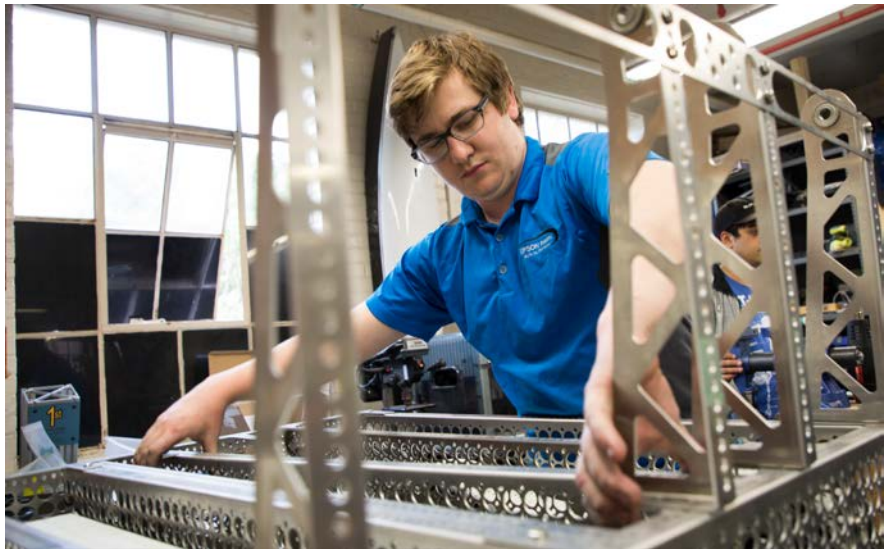
HANDS-ON, MINDS-ON EDUCATION

EXPERIENTIAL LEARNING



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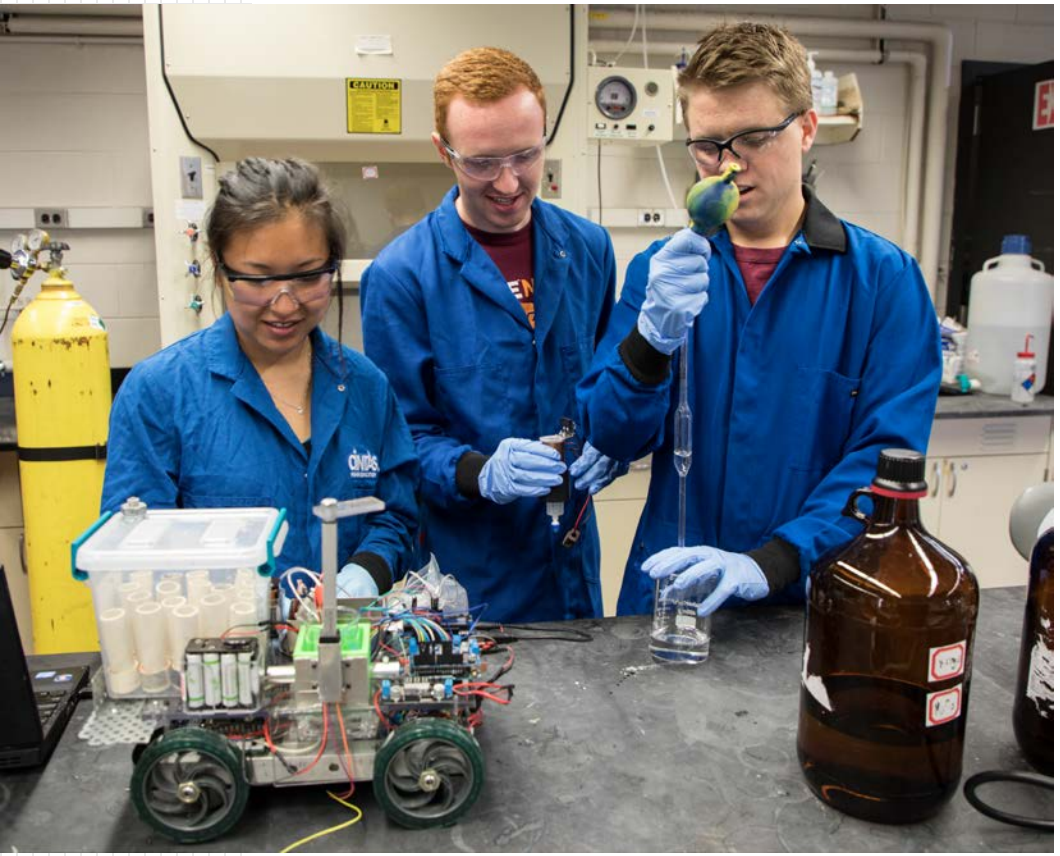
RESEARCH EXPENDITURES



ENGINEERING COLLEGES/SCHOOLS			
1	Johns Hopkins	11	UC-Berkeley
2	Georgia Tech	12	Illinois
3	MIT	13	Ohio State
4	SUNY-Nano S&E	14	NC State
5	Penn State	15	Wisconsin
6	Texas A&M	16	Stanford
7	Michigan	17	Washington
8	Virginia Tech	18	UC-San Diego
9	Texas-Austin	19	Maryland

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INCLUSIVE EXCELLENCE

Center for the Enhancement of Engineering Diversity

$5 million gift from alumnus, Joe May and family creates pathway for 60 first-generation students per year

New Horizon Graduate

VIRGINIA TECH

FY17 FUNDRAISING | PHILANTHROPY

RECORD BREAKING YEAR

69%

INCREASE UP FROM FY16

$43.57 million

NEW GIFTS & COMMITMENTS

VIRGINIA TECH

Committee Minutes

BUILDINGS AND GROUNDS COMMITTEE

The New Classroom Building – Room 130A
June 4, 2018

Open Session

Board Members Present: Mike Quillen, C.T. Hill, Robert Mills, Jeff Veatch

VPI & SU Staff: Bill Abplanalp, Jennifer Altman, Mac Babb, Van Coble, Joe Crane, Robbie Farley, Lance Franklin, Elaine Gall, Mark Gess, Alan Grant, Chris Kiwus, Heidi McCoy, Robin McCoy, Sarah McCoy, Grant Morris, Mike Mulhare, April Myers, Ed Nelson, Robert Sebek, Kayla Smith, Steven Smith, Heather Snidow, Jason Soileau, Jon Clark Teglas, Sherwood Wilson, Alison Wolfe

1. **Tour:** The Committee toured English Field at Union Park, Rector Field House, and O'Shaughnessy Hall.

2. **Welcome**

3. **Consent Agenda:** The Committee approved and accepted the items listed on the Consent Agenda:

   a. **Approval of the Minutes for the March 26, 2018 meeting:** The Committee approved the minutes from the last meeting.

   * b. **Resolution for an Ingress and Egress Easement to the New River Valley Regional Water Authority**: The Committee reviewed and approved a resolution authorizing the Vice President for Operations to execute a non-exclusive easement for ingress and egress to the New River Valley (NRV) Regional Water Authority. The NRV Regional Water Authority requested that the university grant this easement along a roadway partially located on university owned property to provide access to a Montgomery County Public Service Authority water tank.

   * c. **Resolution on Appointment to the New River Valley Regional Water Authority**: The Committee reviewed and approved a resolution recommending William R. Knocke as the new at-large member to the Authority. Dr. Knocke is the W.C. English Professor and Program Coordinator in the Charles E. Via, Jr. Department of Civil and Environmental Engineering at Virginia Tech.

   d. **Acceptance of Capital Project Status Report:** The Committee reviewed and accepted the quarterly capital project status report.

4. **Overview of Environmental Health and Safety:** The Committee received an overview of the university's environmental health and safety function from Dr. Lance Franklin, Assistant Vice President for Environmental Health and Safety.

5. **Report on Public Hearing for Solid Waste Authority Amendment:** The Vice President for Operations was appointed by the Board of Visitors at its March 2018 meeting to serve as the university's representative at any public hearings required for changes to the governing documents of the Authority. A public hearing regarding a proposed amendment to the Authority's Articles of Incorporation, which will provide staggered terms of office for the Authority's Board members, was held on May 10, 2018. Dr. Sherwood G. Wilson reported to the Committee that no public comments were received at the public hearing.

* 6. **Resolution to Amend Solid Waste Authority Articles of Incorporation:** The Committee reviewed and approved an agreement to amend the articles of incorporation, to provide staggered terms of office for the members of the Authority's Board of Directors, and to extend the User Agreement with the Authority.

* 7. **Resolution on Appointments to Solid Waste Authority:** The Committee reviewed and approved two reappointments - one joint member and one university representative - to the Montgomery Regional Solid Waste Authority Board of Directors, as a result of changes to the Articles of Incorporation.

8. **Design Review for Holden Hall Renovation:** The Committee received and approved the design review of the Holden Hall Renovation. This approximately 101,000 gross square foot renovation and new construction project includes renovation of the 1940s-era southern wing and the demolition and replacement of the existing, dilapidated north and east wings. The facility will support the College of Engineering and create a showcase venue for the Department of Materials Science and Engineering and the Department of Mining and Minerals Engineering.

9. **Design Review for Bovine Extension, Teaching, and Research Facility:** The Committee received and approved the design review of the Bovine Extension, Teaching, and Research (BETR) Facility. Part of the three-building Improve Kentland Facilities project, the BETR Facility provides approximately 10,200 gross square feet of additional classroom, animal interaction, and demonstration space for the College of Agriculture and Life Sciences. While the BETR Facility's design was approved in August 2015, a redesign effort is underway as part of a cost-management effort.

10. **Annual Report of the University Building Official:** The Committee reviewed and accepted the annual summary report of activities from the University Building Official. As set forth in university policy 5407, the annual report identifies the code enforcement and building permit activities performed during the prior year.

11. **August Agenda Discussion:** The Committee discussed potential topics for inclusion on the August meeting agenda.

*** Requires full Board approval.**

Joint Open Session with the Buildings and Grounds Committee

Board Members Present: Greta Harris, C. T. Hill, Anna James, Robert Mills, Mike Quillen, Robert Sebek – staff representative, Dennis Treacy, Horacio Valeiras, Jeff Veatch

VPI & SU Staff: Mac Babb, Bob Broyden, Van Coble, John Cusimano, John Dooley, Ted Faulkner, Lance Franklin, Mary Helmick, Jim Hillman, Tim Hodge, Robin Jones, Chris Kiwus, Nancy Meacham, Ken Miller, Grant Morris, Mike Mulhare, Mark Owczarski, Charlie Phlegar, Scot Ransbottom, Lisa Royal, Savita Sharma, Dwight Shelton, Kayla Smith, Ken Smith, Jason Soileau, Brad Sumpter, Tracy Vosburgh, Sherwood Wilson

1. **Approval of Resolution for Planning the Slusher Residence Hall Replacement:** The Committees reviewed for approval a resolution for planning the capital project for Slusher Residence Hall Replacement.

   Slusher Residence Hall was built in 1972 and is approximately 125,860 gross square feet with housing capacity for about 630 students. The facility has received few improvements since its original construction, does not meet student expectations, carries a significant deferred maintenance backlog, and requires frequent repairs that interrupt services.

   The university has determined, because of Slusher Hall's condition, that the facility should be replaced rather than renovated. The university will first build and occupy a new residential facility neighboring the existing Slusher Hall, then demolish and remove Slusher Hall, and, then build a second building on the site. The total bed count of the new facilities will equal or exceed the existing 630 beds with the intention to maximize the number of beds to the extent practical. This request is for a $3.5 million planning authorization to complete preliminary design documents for the Slusher Hall Replacement project.

   The Committees recommended the Resolution for Planning the Slusher Residence Hall Replacement to the full Board for approval.

2. **Approval of Resolution for Dietrick First Floor and Plaza Renovation Supplement:** The Committees reviewed for approval a resolution for Dietrick First Floor and Plaza Renovation Supplement.

   The Board of Visitors approved the Dietrick First Floor and Plaza renovation project with a $7 million total project cost at its September 11, 2017 meeting. The scope and budget for the project resolution were based on a feasibility study from a consultant and internal reviews. Planning work is underway, and schematic design cost reviews reveal the actual total project costs exceed $7 million for the authorized scope.

The university has reviewed and analyzed each construction cost component of the project at the conclusion of schematic design and determined the total construction costs are $6.8 million. The soft costs for design, project management, inspections, equipment, furnishings, etc. are $1.5 million. Thus, the total project costs inclusive of design, construction, and equipment are $8.3 million. The university has reviewed and analyzed opportunities for cost controls and determined a major scope reduction, either elimination of the plaza improvements or elimination of the enclosure for the seat expansion, would be necessary to remain within the current $7 million project budget. The full project scope is necessary to meet the needs of the dining program and student expectations. The university has developed a financing plan to support the additional $1.3 million of costs necessary to complete the entire scope of work. This request is for a $1.3 million supplement to adjust the total authorization for the Dietrick First Floor and Plaza Renovation project to $8.3 million.

The Committees recommended the Resolution for Dietrick First Floor and Plaza Renovation Supplement to the full Board for approval.

There being no further business, the meeting adjourned at 11:32 a.m.

*** Requires full Board approval.**

BUILDINGS AND GROUNDS COMMITTEE
June 4, 2018
Capital Project Status Report

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
FEASIBILITY						
Global Business Analytics Complex	The Feasibility Study for the Global Business Analytics Complex (G-BAC) will investigate facility options for up to four buildings comprising a replacement for the Pamplin College of Business, creation of a Data Analytics and Decision Sciences facility, and two living/learning communities.	TBD	TBD	Moseley Architects/RAMSA TBD	July 2018	Fundraising efforts by Pamplin College of Business are ongoing. Data Analytics and Decision Sciences component is pending approval by the General Assembly (not expected before July 2019). Capital Assests and Financial Management (CAFM), in conjunction with the Facilities Department and Division of Student Affairs, is generating a Pro Forma and Project Resource Plan for the living/learning community facilities envisioned for the project.
Global System Sciences	Envisioned as a destination, the facilities will serve as the headquarters of what is anticipated to be a world-renowned group focused on solving critical regional and global problems, including environmental, animal and human health. This facility will include disciplinary and interdisciplinary faculty of the College of Science, College of Natural Resources and Environment, College of Agriculture and Life Sciences, Virginia-Maryland Regional College of Veterinary Medicine, and university research institutes to facilitate education and research related to this important destination area.	TBD	TBD	EYP TBD	TBD	A/E contract issued to EYP for feasibility study. Kickoff meeting completed in April 2018. Study is ongoing.
Newman Library Feasibility Study	The project will evaluate the existing building's infrastructure, code compliance requirements for egress, change of building use, and restroom facilities.	TBD	TBD	Colley Architects Blacksburg, VA TBD	April 2018	Feasibility study is complete. Project is not envisioned to be approved for state funding prior to July 2019.
Southgate Dining Food Production Center	The purpose of this feasibility study is to provide Dining Services with appropriate and sufficient information to determine the most desirable option for the future growth of the Food Processing Facility. The three options being explored are: 1. Renovation/additions to existing facility, 2. Renovation/addition & new building - separate functions, 3. New building.	TBD	TBD	Architects Alliance TBD	TBD	Feasibility study is underway. A/E will be providing deliverables for each of the design options, including potential site locations for a new facility, by summer 2018.
DESIGN						
Boiler Package 12	Demolition and disposal of decommissioned coal fired boiler (No. 6) and installation of a new 100 lbs/hour natural gas/oil fired packaged boiler (No. 12)	$6,800,000	$6,800,000	Affiliated Engineers, Inc. (AEI) Atlanta, GA TBD	Winter 2019	Project is currently in design and on track. Early purchase of the new boiler is on track. Demolition package to abate lead/asbestos and demolish/remove the existing boiler (#6) is on track to begin in early summer 2018.
Chiller Plant Phase II	This project includes the replacement and upgrade of plant equipment in the existing campus chiller plants and the expansion of the underground distribution infrastructure to link campus chiller substations and bring additional existing campus buildings online. Improvements include the replacement of two outdated chillers in the North Plant with two new upgraded larger capacity chillers; and addition of two new 1,500 ton chillers in the Southwest Plant. The project also includes the replacement and upgrade of ancillary equipment with state-of-the-art, optimally sized pumping and system support equipment.	$39,286,000	$9,797,040	Affiliated Engineers, Inc. (AEI) Atlanta, GA TBD	Summer 2021	Project is currently in design and on track. Construction projected to start first quarter of calendar year 2019.
Corps Leadership and Military Science	Three story structure that provides a centralized and consolidated home to the Corps of Cadets administration and ROTC programs.	TBD	TBD	Clark Nexsen TBD	TBD	Preliminary Design documents completed. Project on hold pending state authorization for general fund for development of working drawings and construction.

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
Creativity & Innovation District Living Learning Community	This project involves the provision of a new residential life building in the emerging Creativity & Innovation District. The proposed 203,000 GSF (600 bed) facility will support the growing living/learning community anticipated for this key area of campus and supports the university's Beyond Boundaries initiative.	$105,500,000	$105,500,000	VMDO Charlottesville, VA TBD	Summer 2021	Design-build project. Criteria/Bridging Document Phase is underway and on track. Procurement of the Design-Build team is targeted for fall 2019.
Dietrick Hall Enclosure & Spirit Plaza	This project will expand dining services by enclosing approximately 6,400 GSF of overhang area to create new interior dining space. The exterior plaza area will be renovated to create an outdoor venue that can provide an environment to study and host events and gatherings.	$7,000,000	$7,000,000	AECOM Roanoke, VA	TBD	Project is under design. Invitation for Bids for construction phase anticipated in late fall 2018.
HITT Hall and the Intelligent Infrastructure Complex (Smart Dining)	Program elements envision a 30,000 GSF HITT Hall space connected to Bishop-Favrao Hall, a 15,000 GSF Fusion Lab, a 30,000 GSF Smart Dining space and a 5,000 GSF Data for the Masses student activity space. Project intent is to showcase technology and innovation as a key component of the Intelligent Infrastructure Destination Area.	$50,000,000	$50,000,000	Lord Aeck Sargent (LAS) Atlanta, GA TBD	Summer 2021	Design-build project. Criteria/Bridging Document Phase is underway and on track. Procurement of the Design-Build team is targeted for first quarter of calendar year 2019.
Holden Hall Renovation	This project includes the renovation of an approximately 21,000 GSF portion of Holden Hall fronting the Drillfield. The remaining 21,000 GSF of the existing building will be demolished and replaced with approximately 80,000 GSF of new engineering instruction and research space for a total building size of 101,000 GSF.	$66,314,000	$17,500,000	Moseley Architects Virginia Beach, VA W.M. Jordan Co.	Fall 2021	Project is under design and on track. Construction start scheduled for summer 2019.
Improve Kentland Facilities (Phase II)	This project includes new construction of three buildings totaling approximately 28,900 GSF including a metabolic research laboratory, an applied reproduction facility, and a bovine extension teaching/research facility to serve Agency 229, Virginia Cooperative Extension, and the Virginia Agricultural Experiment Station.	$9,363,000	$0	Spectrum Design, PC Roanoke, VA TBD	Fall 2019	Project on track for re-bid in June 2018.
Livestock and Poultry Research Facilities (Phase I)	This project is the first of two phases to renew existing facilities for the College of Agriculture and Life Sciences' livestock and poultry programs. This first phase includes approximately 126,000 GSF of new and renovated facilities located along Plantation Road and Giles Road and at Kentland Farm.	$22,500,000	$0	Spectrum Design, PC Roanoke, VA TBD	Summer 2020	Project is under design and on track. Invitation for Bids for construction phase anticipated for the first quarter of 2019.
Multi-Modal Transit Facility	This is a Capital Lease Project administered by the Town of Blacksburg and funded by Federal Transportation Administration grants and a university match. The project is targeted for LEED Platinum to provide a campus sustainability demonstration showcase.	$44,000,000	N/A	Wendel Associates Buffalo, NY TBD	TBD	Project is under design at approximately 95 percent complete. A/E intends to complete full design by summer 2018. Town of Blacksburg has indicated an approximate $8M budget shortfall based upon current cost estimates prepared by the A/E. Town of Blacksburg is attempting to mitigate the shortage.
Student Wellness Improvements	The project provides a comprehensive solution for student wellness services through upgrades to McComas Hall and major renovations to War Memorial Hall to meet the needs of the Schiffert Health Center, Cook Counseling Center, Recreational Sports, College of Liberal Arts and Human Sciences programs, and the College of Agriculture and Life Sciences (Human Nutrition Foods & Exercise).	$63,000,000	$63,000,000	CannonDesign Baltimore, MD TBD	Spring 2022	Project is under design and on track. CM at Risk procurement efforts are currently underway.

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
Undergraduate Science Laboratories Renovations	This project will repurpose six laboratory/teaching spaces in Derring Hall and one laboratory in Hahn Hall. These repurposed laboratories will expand space to meet growing demand for course sections in biology, chemistry, organic chemistry, and microbiology.	$10,000,000	$10,000,000	Studio Twenty Seven Architecture Washington, DC TBD	August 2019	Project is slated to re-bid in June 2018.
Undergraduate Science Laboratory	The project will construct a new undergraduate science laboratory facility of 102,000 gross square feet (GSF) to accommodate the growing demand for STEM-H degrees at Virginia Tech.	$71,709,000	$0	ZGF Architects Washington, DC TBD	Fall 2021	Project is currently in design and on track. Earliest possible date for approval of state funding for working drawings development and construction is July 2019.
CONSTRUCTION						
Athletic Facilities Improvements	This is an umbrella project for improvements to multiple athletics facilities, including Rector Field House, Baseball, Tennis, and the Bowman Room (Performance Center).	$37,500,000	$37,500,000	Rector: Cannon Design Baseball: Cannon Design Tennis: TKA Architects (Criteria Documents) Nutrition: Hanbury Architects Rector: Branch Associates Baseball: Whiting-Turner Contracting Co. Tennis: D/B Contractor TBD Student Athl Perf: Hanbury	Rector: Spring 2018 Baseball: Spring 2018 Tennis: TBD Nutrition: TBD	Sub-projects as follows: 1) Rector Field House - Construction reached Substantial Completion in March 2018. 2) Baseball - Construction at Weaver reached Substantial Completion in March 2018. Construction of stadium reached Substantial Completion in May 2018. 3) Tennis - Project on hold pending funding. 4) Student-Athlete Performance Center - Project is under design and on track.
Fire Alarm Systems and Access	This project provides for critical life safety improvements in several educational and general facilities on campus. Fire alarm systems will be installed or expanded in as many campus buildings as funding allows, including Architecture Annex, Food Science & Technology, Lane Hall, Litton-Reaves Hall, Norris Hall, Patton Hall, Randolph Hall, War Memorial Hall (Gym), Wallace Annex, and Whittemore Hall.	$4,900,000	$0	Multiple A/E Firms Multiple Contractors	Summer 2018	Installation of Fire Alarm System completed in all buildings except Norris Hall and Litton Reaves Hall which are scheduled to be completed in June 2018.
Lane Electric Substation Expansion	This project will expand the existing electrical sub-station to add approximately 37 percent additional power capacity to serve the campus Life Sciences and Northwest Precincts and the Corporate Research Center's proposed expansion.	$6,500,000	$6,500,000	Appalachian Electric Power and Virginia Tech Electric Service Appalachian Electric Power and Virginia Tech Electric Service	Summer 2019	Project is administered by Virginia Tech Electric Service in coordination with Appalachian Power Company and Appalachian Electric Power. Project is currently on track for completion in summer 2019.
O'Shaughnessy Hall Renovation	This project includes major renovation of a 72,000 GSF student residence building into a living-learning community. The residence hall originally housed 350 students and upon completion will house 344 students.	$21,500,000	$21,500,000	Moseley Architects Virginia Beach, VA WM Jordan, Roanoke, VA	August 2018	Project is on schedule for completion in summer 2018 and occupancy in August.

Project Name	Project Description	Estimated Total Project Cost	Non-General Funds	Project Teams	Contract Completion Date	Project Status
Renovate/Renew Academic Buildings	This project will renovate three existing campus buildings - Sandy Hall, Liberal Arts Building, and the original portion of Davidson Hall. Collectively, these renovations will increase the functionality of three underutilized building assets, address several deferred maintenance issues, and reduce critical space deficiencies. Small additions are planned for Sandy and Liberal Arts Buildings to meet current emergency egress code requirements. New elevators in Sandy and Liberal Arts Buildings will provide ADA access.	$35,029,000	$0	Glavè & Holmes Architects Richmond, VA Branch & Associates Roanoke, VA	August 2018	Construction is underway on all three buildings. Davidson and Liberal Arts are expected to be complete by the start of Fall Semester 2018. Sandy Hall is lagging slightly behind due to unforeseen site conditions.
Unified Communications and Network Renewal Project	This project replaces outdated equipment and upgrades campus communications systems, providing infrastructure and equipment enhancements over a five year period. The project scope includes upgrades to the Internet Protocol (IP) Network, the cable plant, and equipment rooms in buildings throughout campus.	$16,508,000	$16,508,000	Multiple A/E Firms Various Contractors	December 2017	Project is complete. Final closeout actions underway.
Upper Quad Residential Facilities	This project provides for the demolition and construction of replacements for Brodie and Rasche residence halls to serve the Corps of Cadets. The new residence halls (totaling approximately 210,000 GSF) will provide over 1,000 beds in double and triple rooms sharing hall community bathrooms. These new residence halls will be constructed at the approximate location of the original Rasche Hall and Brodie Hall. Both buildings will provide double and triple occupancy rooms that meet the residence and in-room storage space needs of the cadets. Both new residence halls will provide dedicated meeting, community, and group spaces, specifically designed to meet Corps of Cadets program and organization needs. Thomas Hall and Monteith Hall will also be demolished as part of this project.	$91,000,000	$91,000,000	Clark Nexsen Charlotte, NC Barton Malow Company Charlottesville, VA	Pearson - August 2015 New Cadet Hall - April 2017	Project is complete. Final closeout actions underway.
Virginia Tech Carilion (VTC) Biomedical Research Expansion	This project, executed under the Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA), will construct an approximately 139,000 GSF building adjacent to the Virginia Tech - Carilion Research Institute in Roanoke, VA. The new facility will include high intensity biomedical research capable laboratories with surgical-type suites, Bio-safety Level Three laboratories, and animal imaging facilities that require high-field magnetic resonance imaging. The remaining space will include high-intensity dry laboratory research and training spaces including computational facilities, offices, procedural training rooms, and technical training space.	$89,865,000	$0	AECOM Skanska	January 2020	Project fast-tracked for construction. Site work is underway. Design reached 95 percent and full permit sets are expected to be issued in early June 2018.

June 4, 2018

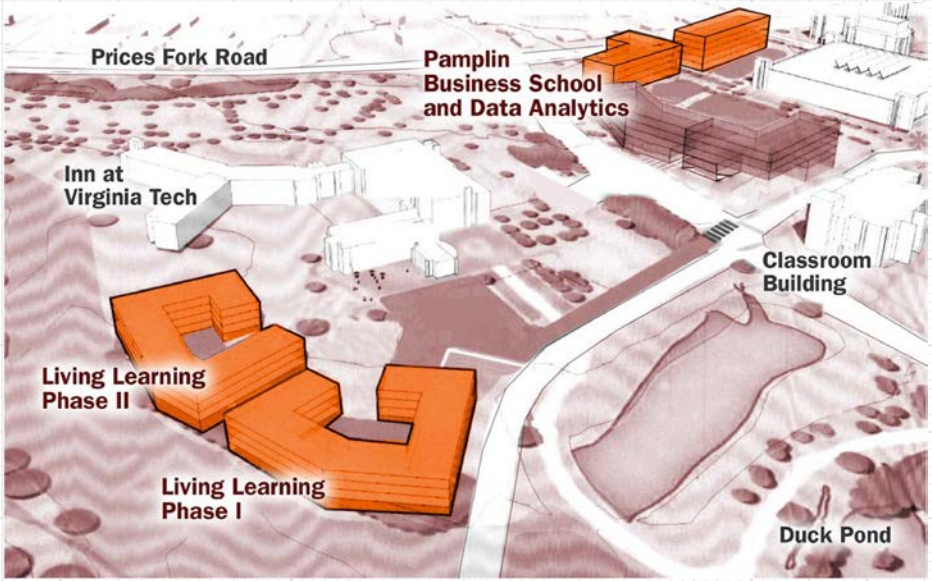
Capital Project Status Report

Christopher H. Kiwus, PE, PhD
Associate Vice President and Chief Facilities Officer

VIRGINIA TECH

Projects In Feasibility

- Global Business Analytics Complex
- Global System Sciences
- Newman Library Feasibility Study
- Southgate Dining Food Production Center



VIRGINIA TECH

EHS Overview

Lance Franklin, PhD, PE
Assistant Vice President for EHS

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Services

Laboratory Safety

Biological Safety

Radiation Safety

Occupational Health and Safety

Environmental Compliance

Off Site Safety

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Mission

EHS mission is to support and advance the teaching, learning and research activities of the university through promotion of a safe and health campus environment by providing and coordinating programs and services that minimize risk associated with safety, health, environmental and regulations to the Virginia Tech community in a manner consistent with responsible fiscal and environmental stewardship.

EHS has 34 employees who maintain nearly 100 programs to fulfill its commitment to health and safety within the Virginia Tech community.

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Key Metrics

Biological Safety | Laboratory Safety | Environmental Compliance
Radiation Safety | Occupational Health and Safety | Off Site Safety

FY17 Budget

Salary - $1.93M
E&G - $137,652
Central - $1.22M
32 FTEs
6 Wage Workers
3 Consultants
1 Contracted Physician

- ~ 13M sqf Building Space
- ~ 1.5M sqf of Lab Space
- ~ 32,000 People Trained Annually
- ~ 2800 Permitted Spaces
- ~ 1300 Annual Inspections
- 11 ARECs
- Research Institutes
- Equine Medical Center
- Occoquan Watershed labs
- Northern Virginia Facilities
- CRC
- Power Plant
- Quarry
- Farms

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

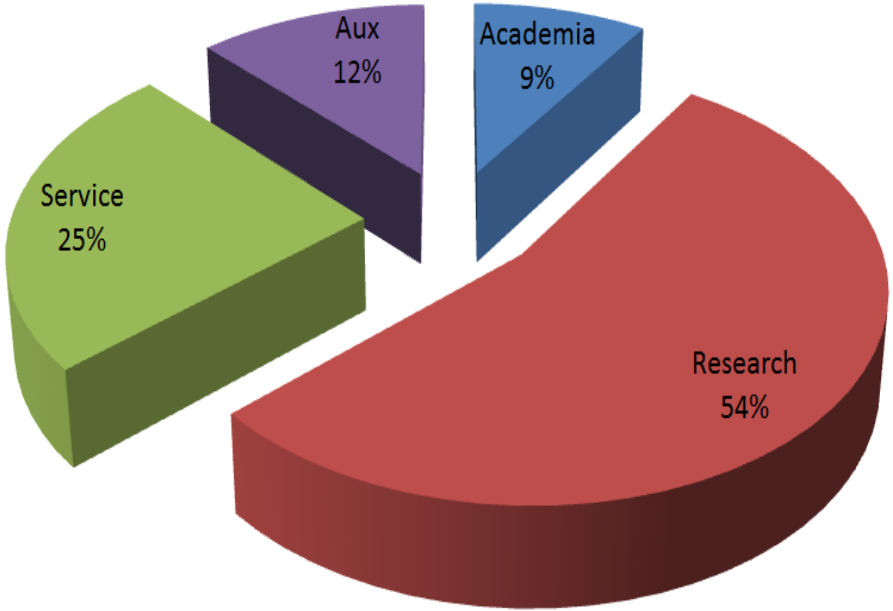
Distribution of Services

Service
- Facilities
- Business Operations
- Police
- Emergency Management
- Information Technology

Auxiliaries
- Athletics
- Student Affairs

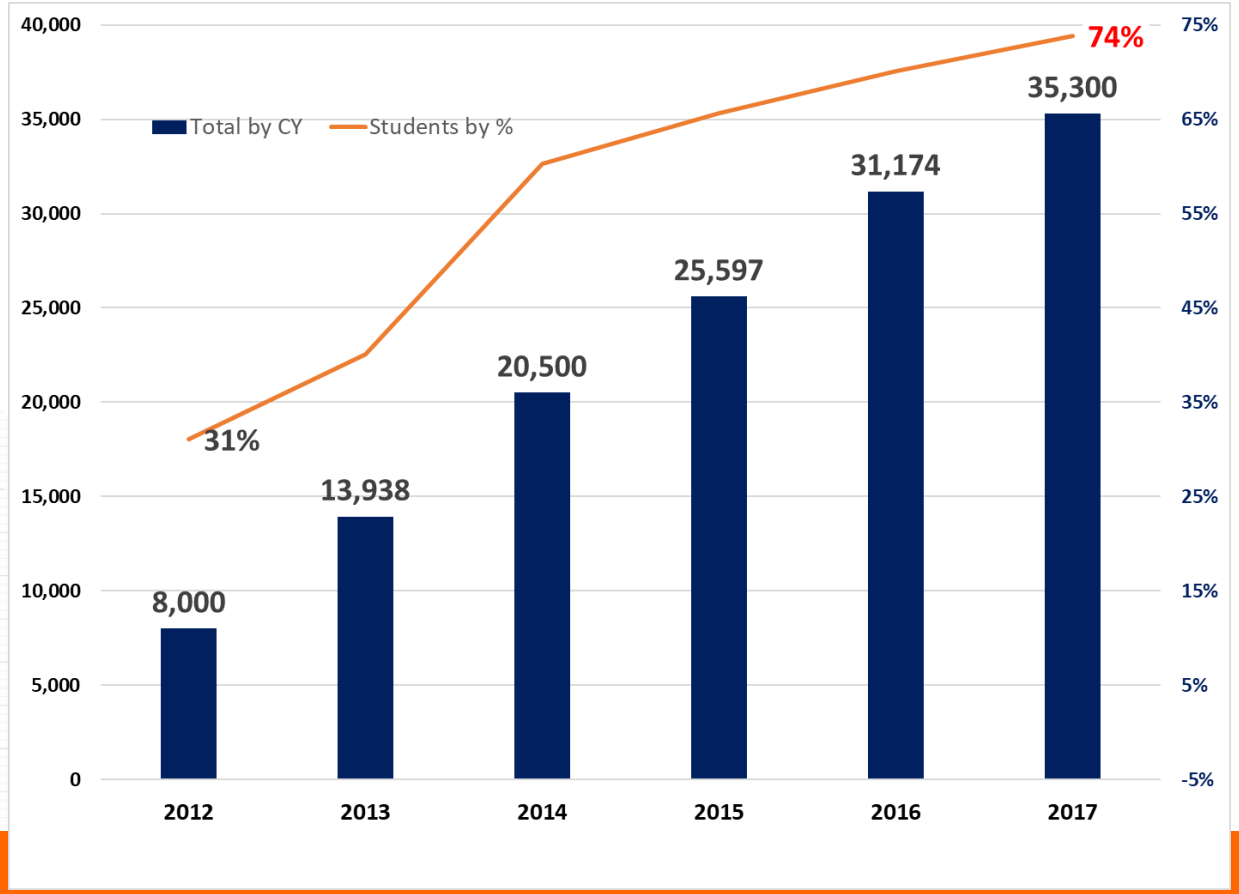
Academia

Research



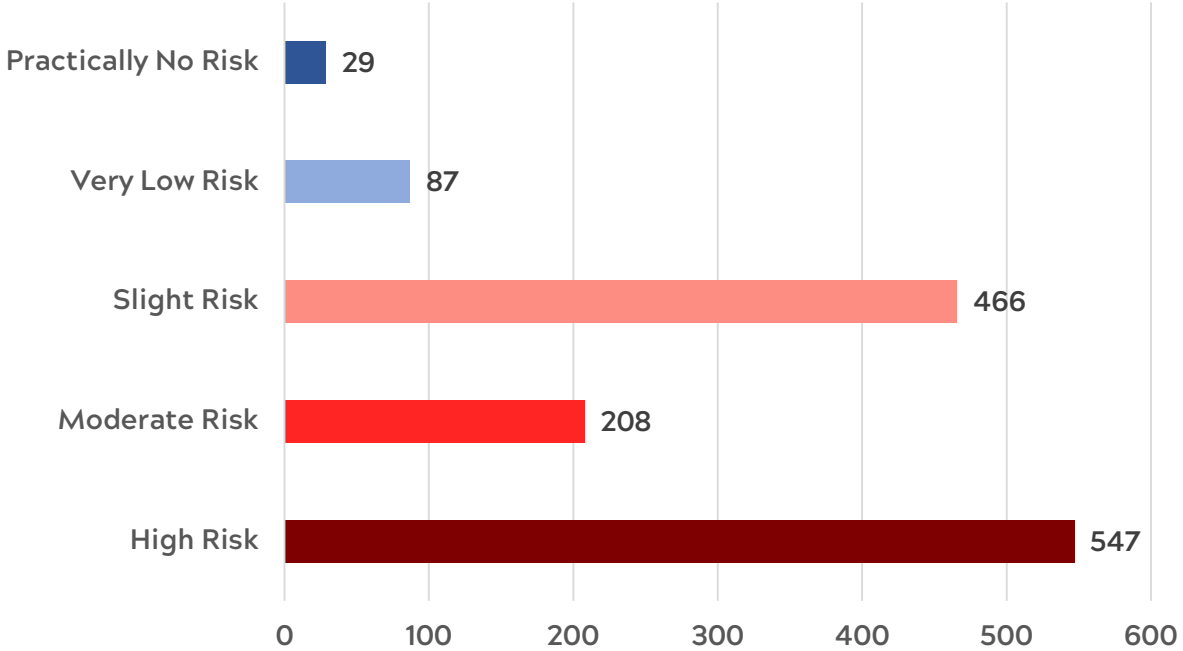
ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

EHS Training by Number of Recipients and Percent of Students, since 2012



ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Laboratories and Permitted Areas by Risk Categories N= 2,790



ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Biological Safety

Operational Programs

- 3 BSL-3s – can cause severe to fatal disease in humans; vaccines or treatment are available
- 296 BSL-2s – mild disease to humans or are difficult to contract
- 34 ABSL-2 facilities
- 2 Insectarium facilities
- Liaison – IACUC, IBC, IRB

BSL – biosafety level
ABSL – animal biosafety level

FY17 Budget

Salary - $383,241
E&G - $14,094
Central - $0
5 FTEs

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Laboratory Safety

FY17 Budget

Salary - $499,006
E&G - $103,009
Central - $666,380
8 FTEs
3 PTEs

Operational Programs

- 1,600 laboratories
- 128 tons of chemical waste generated annually
- 26 tons electronic waste
- 149 tons regulated medical waste

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Occupational Safety and Health

Operational Programs

- > 3,400 medical clients worldwide
- > 1,000 vaccinations at an annual cost of ~ $80,000
- > 200 fire drills/tabletops
- > 400 inspections/program audits
- > 600 injury reports reviewed
- > 300 research consultations

FY17 Budget

Salary - $599,625
E&G - $33,487
Central - $470,000
11 FTEs
3 PTEs
1 Contracted Physician

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Radiation Safety

FY17 Budget

Salary - $51,260
E&G - $7,480
Central - $26,1800
0.75 FTE
1 Health Physics Consultant

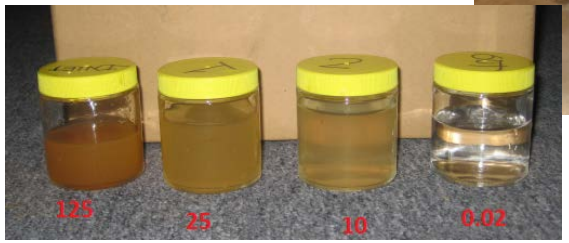
Operational Programs

- Nuclear Medicine –VetMed, VTH and Equine Medical Center
- X-Ray equipment certification
- 76 laboratories
- 2 tons of radioactive waste generated annually
- 1,840 radiation users
- 300 packages of radioisotopes received annually
- 100 Geiger counter calibrations

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Environmental Compliance

Operational Programs



- Consent Order Management
- Greenhouse Gas Inventory
- Air Permit Compliance
- Petroleum Storage Management
- Landfill Post Closure Care Oversight
- Leachate Discharge System
- Unpermitted Discharge Investigations
- Contaminated Soils Management

FY17 Budget

Salary - $66,232
E&G - $1,500
Central - $63,000
1 FTE
2 Environmental Services Consultants

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Off Site Service (ARECs)

Agricultural Research and Extension Centers

FY17 Budget

Salary - $17,086
E&G - $21,645
Central - $0
0.25 FTE

Operational Programs

- 11 Agricultural Research centers, Equine Medical Center, and Occoquan Watershed labs
- 4 Graduate research centers
- Occupational health services
- Pesticide management
- Hazardous waste oversight
- Personnel safety training
- Farm safety
- Fire and life safety oversight

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

Health and Safety Committee

Chaired by AVP of Environmental Health and Safety (EHS)

Chemical Safety & Hazardous Materials Management Committee

- Hazardous Materials
- Laboratory Safety

Occupational Health and Safety Committee

- Physical Hazards
- Fire Hazards
- Safety Hazards
- Occupational Health

Institutional Animal Care and Use Committee

- Vertebrate Animals

Institutional Biosafety Committee

- Infectious agents
- Recombinant DNA
- Biological origin toxins
- Select agents
- Blood, blood products, cells, unfixed tissue

Institutional Review Board

- Human Subjects

Radiation Safety Committee

- Radioactive Materials
- Radiation-Producing Equipment

Report to AVP of EHS
Led by EHS staff

Report to Vice President for Research & Innovation
Led by Research or College staff

EHS Program Summary

- Research and Academic Support
- Injury Prevention and Loss Reduction
- Business Process and Data Management
- Communication and Outreach
- Sustain our Safety Culture

ENVIRONMENTAL HEALTH & SAFETY
VIRGINIA TECH

REPORT ON PUBLIC HEARING FOR SOLID WASTE AUTHORITY AMENDMENT

The Vice President for Operations was appointed by the Board of Visitors at its March 2018 meeting to serve as the university's representative at any public hearings required for changes to the governing documents of the Montgomery Regional Solid Waste Authority. A public hearing regarding a proposed amendment to the Authority's Articles of Incorporation, which will provide staggered terms of office for the Authority's Board members, was held on May 10, 2018. The Committee will receive a report from Dr. Sherwood Wilson on comments received at the public hearing.

Design Review for Holden Hall Renovation

BUILDINGS AND GROUNDS COMMITTEE

June 4, 2018

Preliminary Design is underway for this approximately 101,000 gross square foot renovation and new construction project. The 1940s-era southern wing of the facility will be renovated, with the north and east wings replacing two existing, dilapidated wings (which will be demolished). The project site is located in the Academic District, bounded by Norris Hall to the west, Old Turner Street to the north, McBryde Hall to the east, and Patton Hall/the Drillfield to the south. The facility will support the College of Engineering and create a showcase venue for the Department of Materials Science and Engineering and the Department of Mining and Minerals Engineering. A Construction Manager at Risk procurement method is being utilized to construct the project. Funding is currently authorized through detailed planning. The Commonwealth of Virginia's Bureau of Capital Outlay Management (BCOM) will provide a final budget recommendation following the university's submittal of preliminary design documents. Pending BCOM's recommendation, construction is targeted to begin in summer 2019, with occupancy to take place in late fall 2021.

Capital Project Information Summary – Holden Hall Renovation

BUILDINGS AND GROUNDS COMMITTEE

June 4, 2018

Title of Project:

Holden Hall Renovation

Location:

The building site is located in the Academic District, bounded by Norris Hall to the west, Old Turner Street to the north, McBryde Hall to the east, and Patton Hall/the Drillfield to the south. It will be located along significant east-west and north-south pedestrian patterns.

Current Project Status and Schedule:

A feasibility study was completed December 2014. Following a design preview approval by the Board of Visitors in September 2017, the project has proceeded to the preliminary design phase. Pending a full funding recommendation from BCOM, construction is targeted to begin in summer 2019, with completion in late fall 2021.

Project Description:

The project is consistent with the current, ongoing 2017 Master Plan update and will support the College of Engineering. Plans include the replacement of two deteriorated wings of Holden Hall, bringing the total facility to approximately 101,000 total gross square feet. The project will retain the south wing closest to the Drillfield.

Brief Program Description:

The facility will provide highly collaborative, thematically clustered spaces as well as create a showcase venue for the Department of Materials Science and Engineering (MME) and the Department of Mining and Minerals Engineering (MME). MSE is currently distributed across campus and the expansion and renovation will allow consolidation of the program and provide better integration of undergraduates. MME is one of the largest programs of its type in the U.S. and consistently ranks in the top ten nationally. The project will allow MME to co-locate and optimize laboratories in an innovative setting, including high-bay mock mine and robotics/automation laboratories.

Contextual Issues and Design Intent:

The existing south wing will be repaired and renovated. New construction will feature Hokie Stone, precast concrete with ornamental reveals and decorative heraldry, and metal cladding. The architectural expression will be consistent with the campus core Collegiate Gothic style and the existing wing of Holden Hall to remain. It will also provide a sensitive response to the visual and physical

connection to Norris Hall.

Demolition of the dilapidated single-story wings will require approval through the Department of Historic Resources and the Art and Architecture Review Board prior to the issuance of a demolition permit.

Architect/Engineer:
Moseley Architects | SMITHGROUPJJR

Construction Manager:
WM Jordan

June 4, 2018

Holden Hall Renovation

Board of Visitors Design Review

VIRGINIA TECH

Holden Hall Renovation

Project Information

- New Construction: ~ 81,000 GSF
- Renovation: ~ 21,000 GSF
- Delivery Method: CM at Risk
- Funding: $66.3 Million*
- Design Phase: Preliminary
- Construction Start: Summer 2019**
- Targeted Occupancy: Late Fall 2021**

VIRGINIA TECH

* BCOM recommendation for schematic design; subject to variation after review of preliminary drawings

** Construction schedule dependent upon provision of state construction funding

Holden Hall Renovation

Project Location

VIRGINIA TECH

Holden Hall Renovation

Existing Conditions (Future Renovation)

VIRGINIA TECH

Holden Hall Renovation

Existing Conditions (Future Addition)

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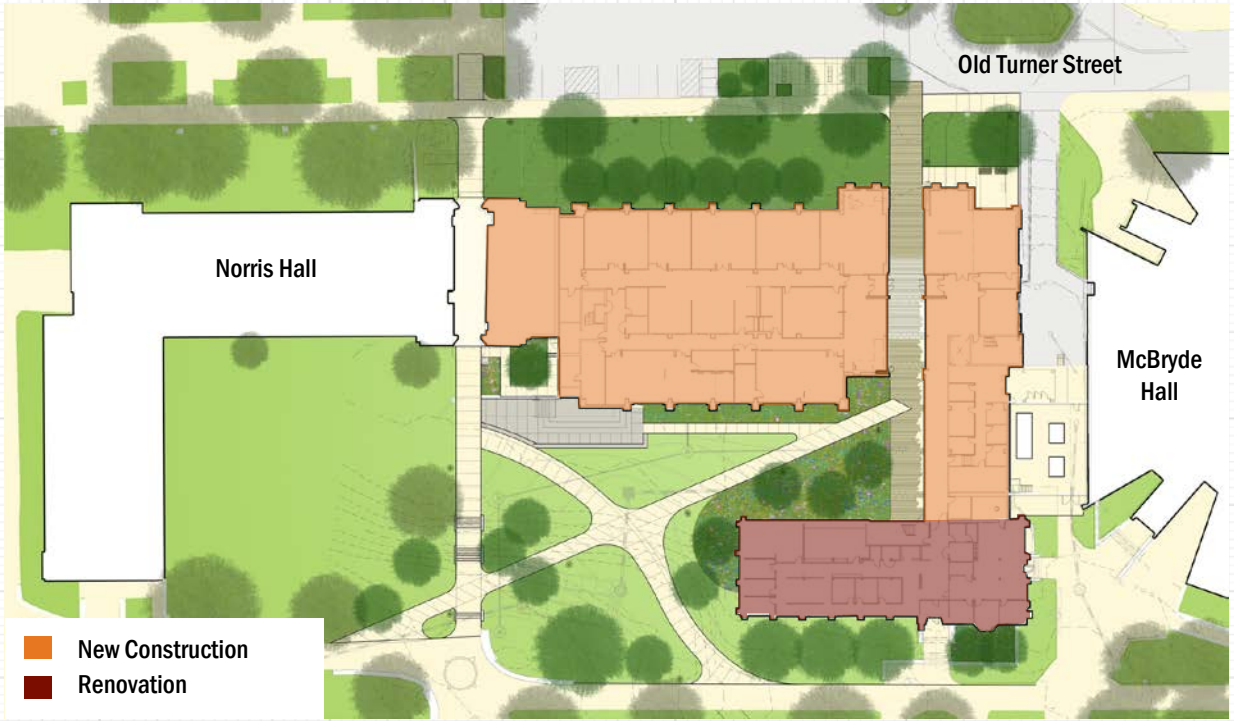
Holden Hall Renovation

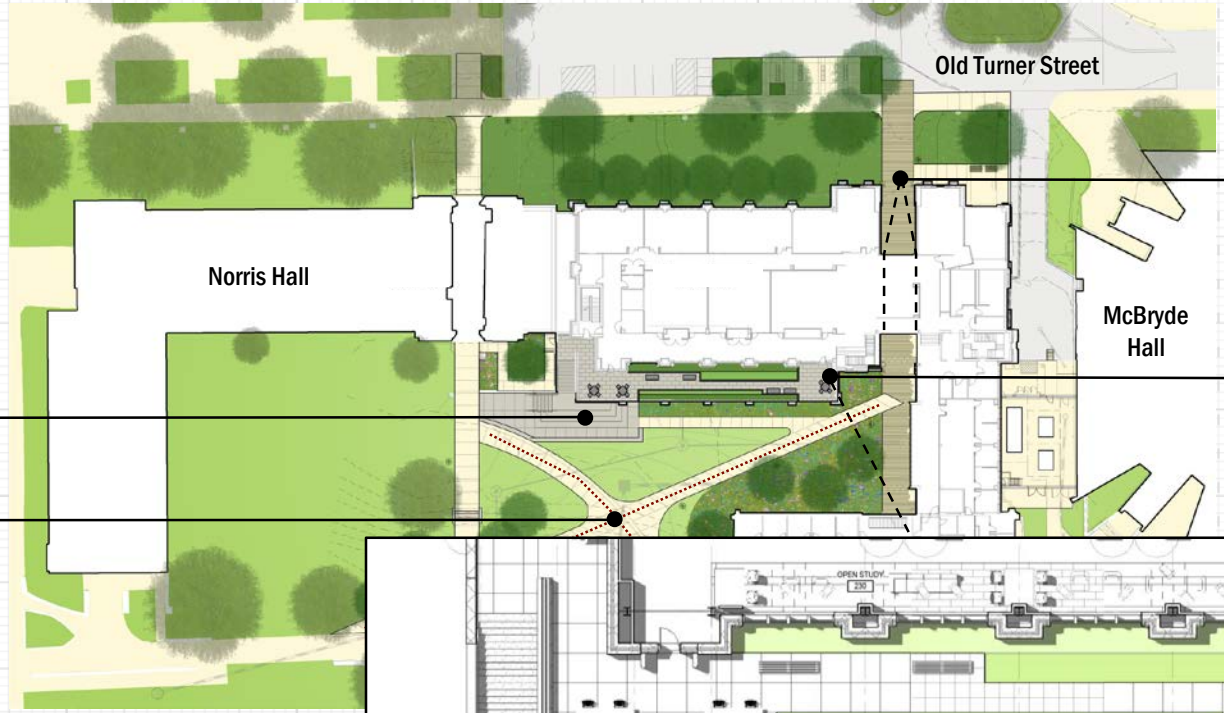
Site Plan

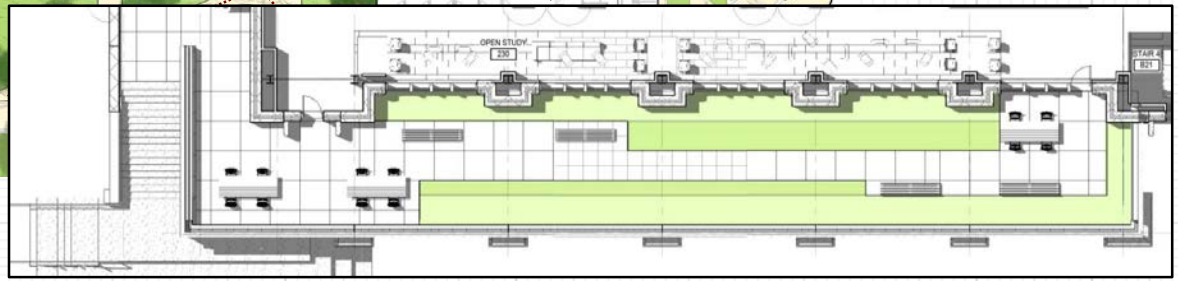


VIRGINIA TECH

Holden Hall Renovation

Site Plan





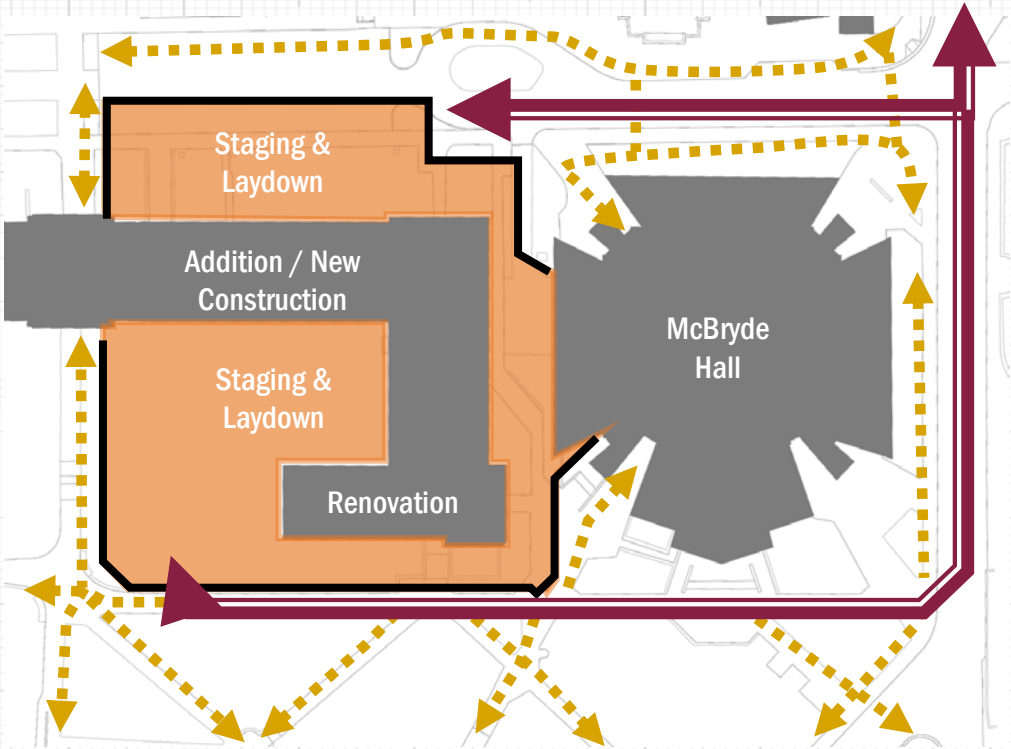
Elevated Terrace (Enlarged)

VIRGINIA TECH

Holden Hall Renovation

Construction Staging & Access*

- Staging Areas
- Site Fencing / Perimeter
- Delivery & Construction Vehicular Access
- Pedestrian Circulation



VIRGINIA TECH

*As reviewed by construction manager

Holden Hall Renovation

First Floor Plan

VIRGINIA TECH

Holden Hall Renovation

Second Floor Plan

VIRGINIA TECH

Holden Hall Renovation

Third Floor Plan

MME and MSE Research Laboratories

Graduate Student / Open Office Seating

VIRGINIA TECH

Holden Hall Renovation

Fourth Floor Plan

MSE Faculty Research Laboratories

Graduate Student / Open Office Seating

VIRGINIA TECH

Holden Hall Renovation

Recommendation

- That the Design Review graphics be approved, and authorization be provided to continue with the project design consistent with the drawings shown.

VIRGINIA TECH

DESIGN REVIEW FOR BOVINE EXTENSION, TEACHING, AND RESEARCH FACILITY

Part of the three-building Improve Kentland Facilities project, the Bovine Extension, Teaching, and Research (BETR) Facility provides approximately 10,200 gross square feet of additional classroom, animal interaction, and demonstration space for the College of Agriculture and Life Sciences. While the BETR Facility's design was approved in August 2015, a redesign effort is underway as part of a cost-management effort.

Capital Project Information Summary – Bovine Extension, Teaching, and Research Facility

BUILDINGS AND GROUNDS COMMITTEE

June 4, 2018

Title of Project:

Bovine Extension, Teaching, and Research (BETR) Facility

Location:

The project is located on Plantation Road between the existing Livestock Judging Pavilion and Campbell Arena (across Plantation Road from the Alphin-Stuart Livestock Teaching Arena).

Current Project Status and Schedule:

This building is being redesigned to advance the Improve Kentland Facilities (IKF) project. This process is expected to conclude in spring 2018. As part of a revised bidding strategy, the BETR Facility serves as an additive bid item in the project. Depending on the outcome of the IKF bidding, the construction of the BETR Facility is targeted to begin in fall 2018. If this schedule is achieved, it is estimated that the College of Agriculture and Life Sciences (CALS) will take occupancy during the fall of 2019.

Project Description:

The BETR Facility provides additional classroom, animal interaction, and demonstration space for CALS. It features approximately 3,700 square feet of new construction for classroom and office spaces and approximately 6,500 square feet of animal demonstration space. A rear exit from the classroom building leads to the animal demonstration area, which is connected via a covered walkway. The demonstration area is a covered, dirt floor arena used for animal interaction and demonstration opportunities. It includes cattle gates around the perimeter. Drop curtains to block the wind and heaters are provided for human comfort.

Brief Program Description:

The classroom building consists of a large classroom space that can be subdivided into two smaller classrooms by a folding partition wall. This configuration allows CALS the flexibility to use the space for large lectures or smaller classroom exercises. One of the classrooms will also have a sink suitable for demonstrations that require water. In addition, a larger office with room for two work stations is provided. Non-assignable spaces in the building include men's and women's toilet facilities, an all-gender restroom, a janitor's closet, IT closet, and a mechanical/electrical room. Mechanical equipment is housed inside the building to protect it from livestock that may roam the grounds.

Contextual Issues and Design Intent:

The goal of the project is to create a facility consistent in appearance with the other agricultural buildings along Plantation Road. The classroom building will be a masonry bearing wall structure with a gable roof. The exterior walls will be clad with metal panel in an off-white color and the roof will be standing seam metal panels in a green color. The demonstration area will be a pre-engineered metal building with a gable roof and similar green metal roofing panels. A roof monitor is provided on both the classroom building and the demonstration area. These colors, materials, and building forms are consistent with existing agricultural facilities adjacent to the BETR site, including Alphin-Stuart Livestock Teaching Arena, Campbell Arena, and the Livestock Judging Pavilion.

Architect/Engineer:

Spectrum Design

General Contractor:

To be determined

June 4, 2018

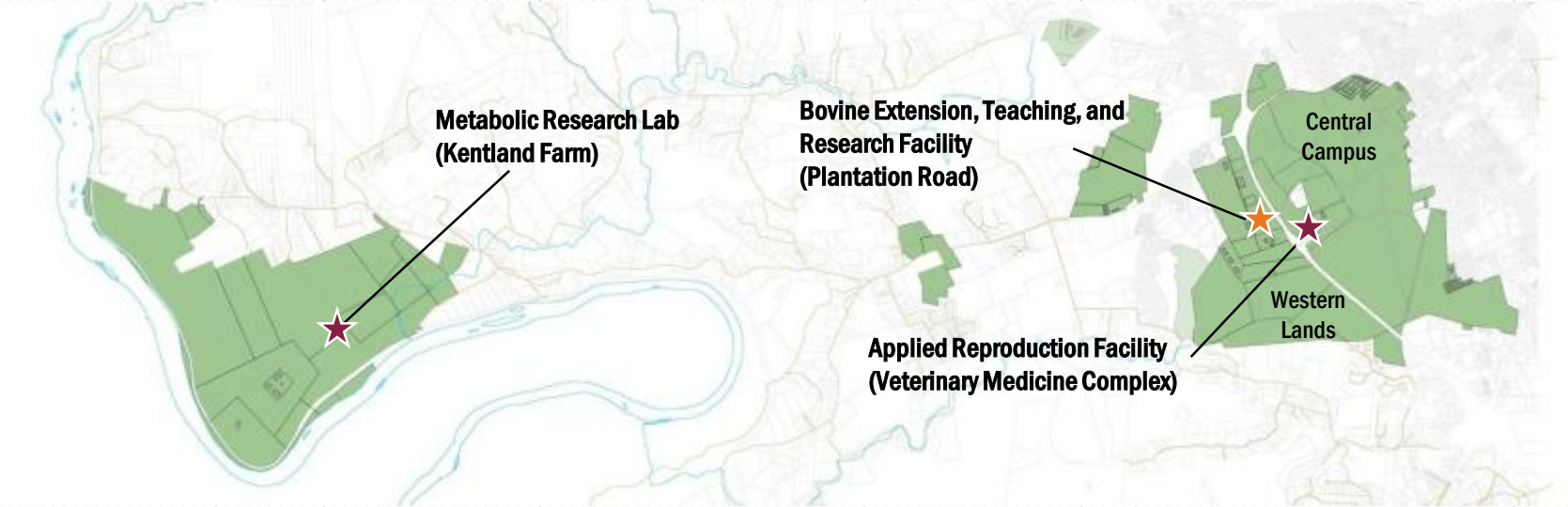
Bovine Extension, Teaching, and Research (BETR) Facility

Board of Visitors Design Review

VIRGINIA TECH

BETR Facility

Project Location



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BETR Facility

Existing Condition

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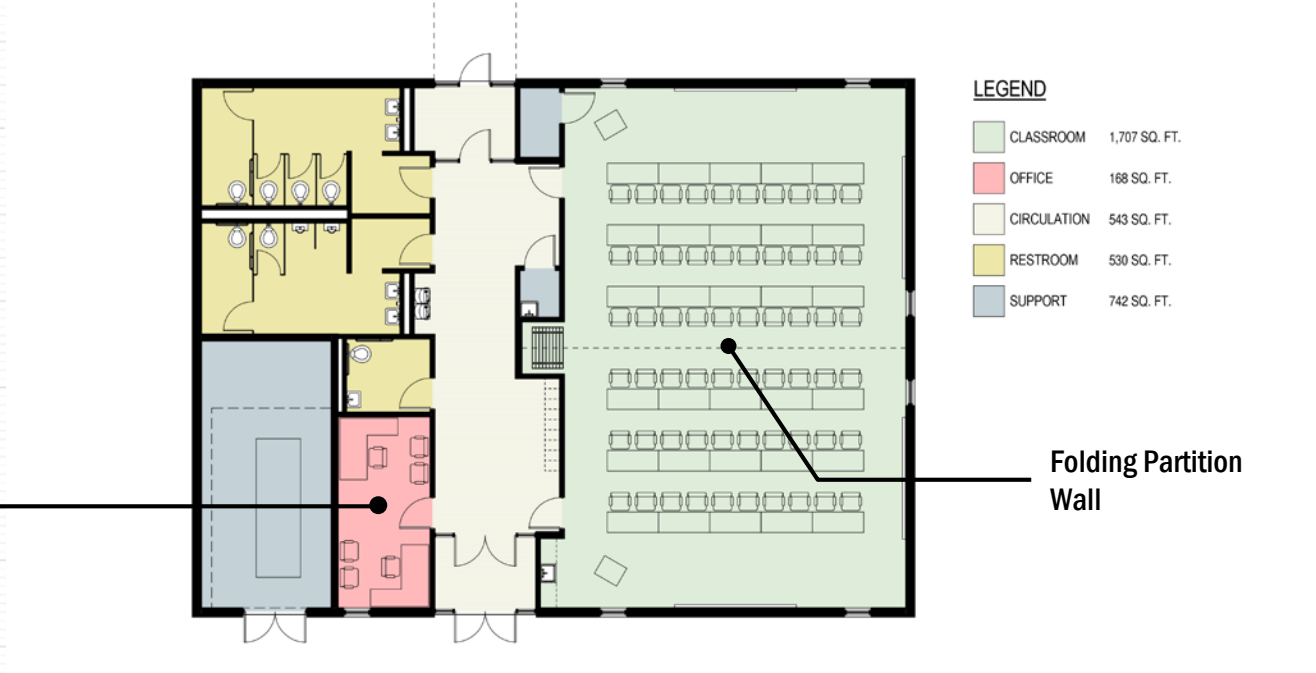
BETR Facility

Floor Plan



VIRGINIA TECH

Original Design Preview: June 2, 2014
Original Design Review: August 30, 2015

BETR Facility

Recommendation

- That the Design Review graphics be approved, and authorization be provided to continue with the project design consistent with the drawings shown.

VIRGINIA TECH

June 4, 2018

Bovine Extension, Teaching, and Research (BETR) Facility

Board of Visitors Design Review

VIRGINIA TECH

Annual Report of the University Building Official
(Report Period April 1, 2017 – March 31, 2018)

BUILDINGS AND GROUNDS COMMITTEE

June 4, 2018

Background

The Restructured Higher Education Financial and Administrative Operations Act of 2005 and the Management Agreement with the Commonwealth of Virginia grant the university the authority to designate its own building official. The Board of Visitors approved a resolution to establish a university building official and building code review unit at its June 20, 2008 meeting and the office was established July 1, 2010. Effective June 3, 2011, the Bureau of Capital Outlay Management (BCOM) formally delegated building official authority for Virginia Tech to the university's building official.

This report serves as an annual summary of activities from the University Building Official (UBO). As prescribed in university policy 5407, the annual report will identify the code enforcement and building permit activities performed during the prior year.

Since the previous annual report, the UBO office has revised many of its processes and procedures to reflect newly purchased permitting software. In addition to streamlining the office's permitting process and tracking capabilities, the revised processes and procedures have consolidated some inspections and created additional permit definitions. As a result, many of the statistics listed below may not directly correlate with those listed in previous years. Editorial notes have been included with some statistics to provide clarity.

For the period of April 1, 2017 to March 31, 2018, the following tasks have been completed:

Major Statistics

- Number of plan reviews for permit performed: 2,564 (increase of 183 or 7% since 2017 Annual Report)
    - Includes repeated reviews to achieve code compliance
- Number of permits issued (all permits and all trades): 1,491 (increase of 116 or 8% since 2017 Annual Report)
- Number of inspections performed (all trades, pass and fail): 3,740 (increase of 658 or 25% since 2017 Annual Report)
- Number of Re-Inspections due to field failures/rejections: 418 (approximate increase of 1%)

- The UBO office is required by the Virginia Statewide Building Code to issue permits for and inspect large tents, stages, and amusement devices.
    - Tent and Stage requests permitted and inspected: 31 (increase of 8 since 2017 Annual Report)
    - Special Events reviewed and inspected: 38 (increase of 14 since 2017 Annual Report)
- Number of Certificates of Occupancy (CO) Issued: 4
    - Prices Fork Research Center Restroom 0672 (March 23, 2018)
    - Eastern Shore Equipment Storage Shed 1222 (September 27, 2017)
    - West Soccer Trailer 0185S (August 31, 2017)
    - East Soccer Trailer 0185R (August 31, 2017)
- Number of Demolition Permits Issued: 22 (increase of 11 since the 2017 Annual Report)

Staffing and Development

- The UBO office participated in code committees to improve staff knowledge and application of the building code and provide input to the upcoming code change expected in 2018.
- The UBO office worked with the Department of Housing and Community Development to provide code enforcement education for other building and fire officials.
- The UBO office provided presentations on codes and code enforcement to several classes in the School of Architecture + Design within the College of Architecture and Urban Studies.

Operations

- Continued the permitting and inspection of sidewalks and other pavements or slabs, as well as roads not covered by the Virginia Department of Transportation.
- Continued the permitting and inspection of utility work outside building footprints.
- Continued to coordinate the permitting and inspection of cabling and conduit penetrations for Network Communication Services, including the removal of abandoned communication wiring across campus.
- Identified several issues of code violations: resolved or working on resolutions with the State Fire Marshal Office regarding work done by the university and contractors without proper permits, plans, or authorization.
- Continued to coordinate efforts with the local building officials association to assist the campus and community through outreach efforts to contractors and staff regarding the building codes.

UNIVERSITY BUILDING OFFICIAL ANNUAL REPORT

Elaine Gall, Interim University Building Official

FACILITIES
VIRGINIA TECH

UBO: OVERVIEW

- Three universities in Virginia have a university building official
  - College of William and Mary
  - University of Virginia
  - Virginia Tech
- Each UBO works under the authority of their institution's Board of Visitors.
- For organizational and daily coordination, UBO falls within the Facilities Department.

FACILITIES
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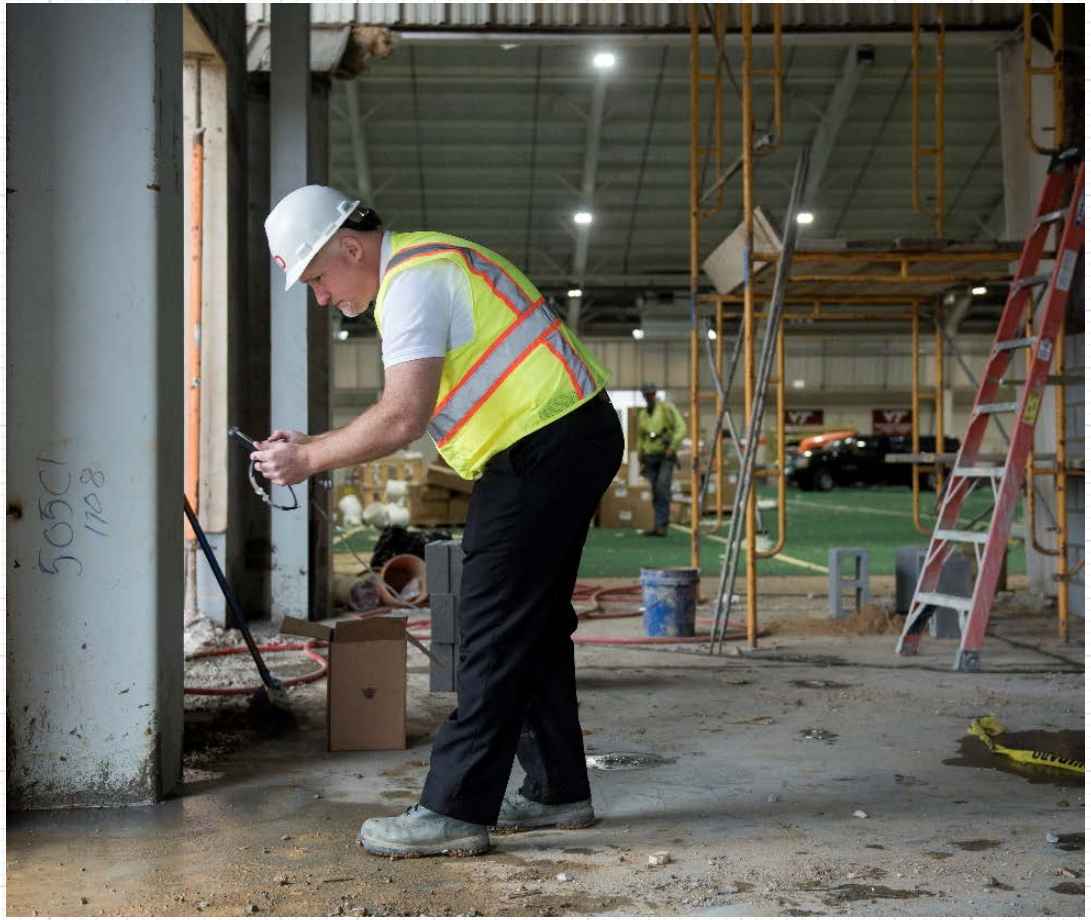
UBO: GOALS

- Ensure our buildings are safe, accessible, and code compliant.
- Help our clients achieve compliance in the least difficult way possible.



FACILITIES
VIRGINIA TECH

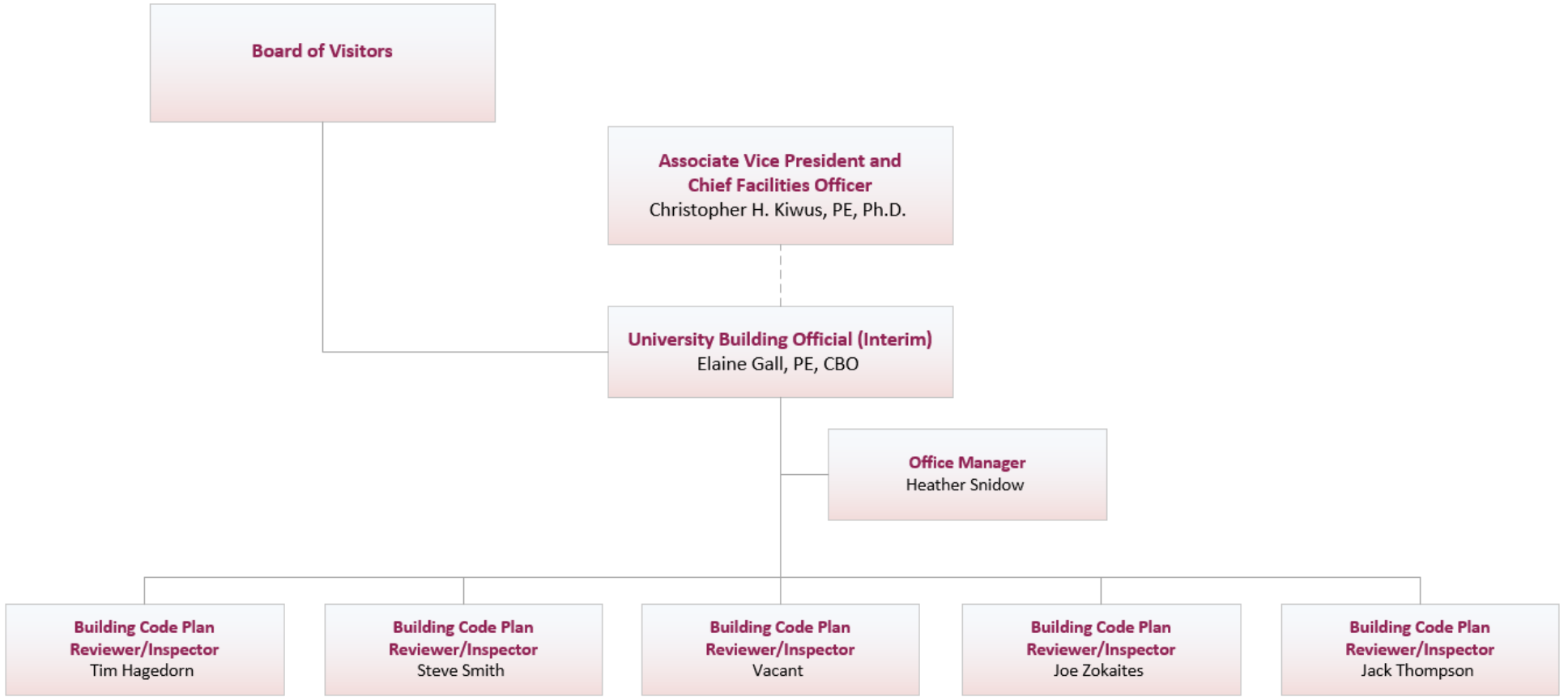
UBO: WHO AND WHAT

What We Do

- Plan Review
- Issue Permits
- Inspections and Testing
- Occupancy Approvals
- Technical Assistance

FACILITIES
VIRGINIA TECH

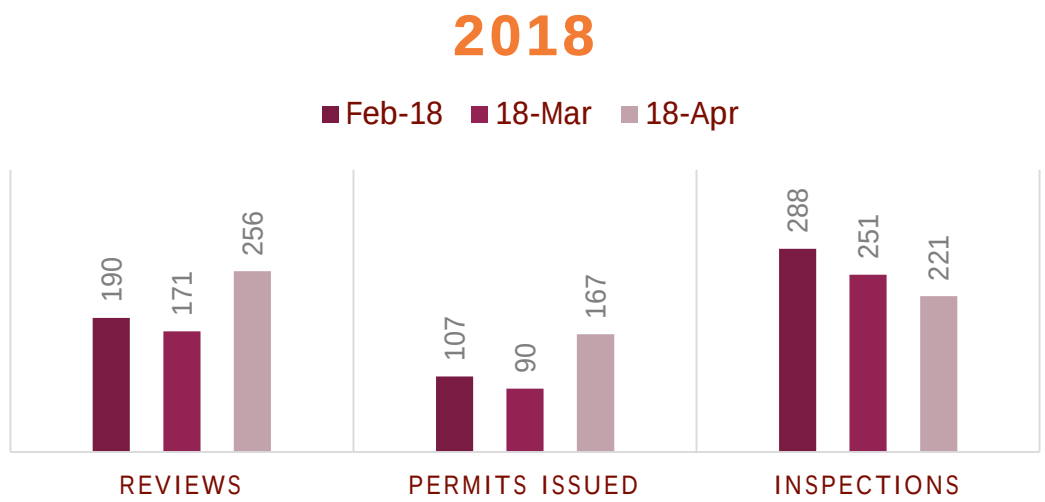
UBO: REVIEW/INSPECTION TEAM



FACILITIES
VIRGINIA TECH.

UBO: STATISTICS

- February 2018
  - 190 Total Reviews
  - 107 Permits Issued
  - 288 Inspections
- March 2018
  - 171 Total Reviews
  - 90 Permits Issued
  - 251 Inspections
- April 2018
  - 256 Total Reviews
  - 167 Permits Issued
  - 221 Inspections



FACILITIES
VIRGINIA TECH

UBO: PERMITTING

- What requires a permit?
- Easier to say what does not need a building permit.
  - Replacement in kind maintenance does not need a permit.
  - Repairs, repainting, re-carpeting do not need permits.
  - Low voltage wiring or internet cables.
    (except when penetrating walls or floors)
- When in doubt, ask!

FACILITIES
VIRGINIA TECH.

UBO: NEW SMALL PROJECT REVIEWS

- New Services for Small Project Plan/Permit Review (SPR)
  - SPR is defined as a project with:
    - limited project scope,
    - no change in the building use, and
    - <$25,000 cost.
  - Project Managers/Clients must submit SPR by noon on Monday.
    - 2 sets of construction documents,
    - Information necessary to issue a building permit.
  - Reviews are performed every Wednesday with clients at the table to ask/answer questions with the goal of issuing a permit.

UBO: NEW SMALL PROJECT REVIEWS

Wednesday Small Project Review

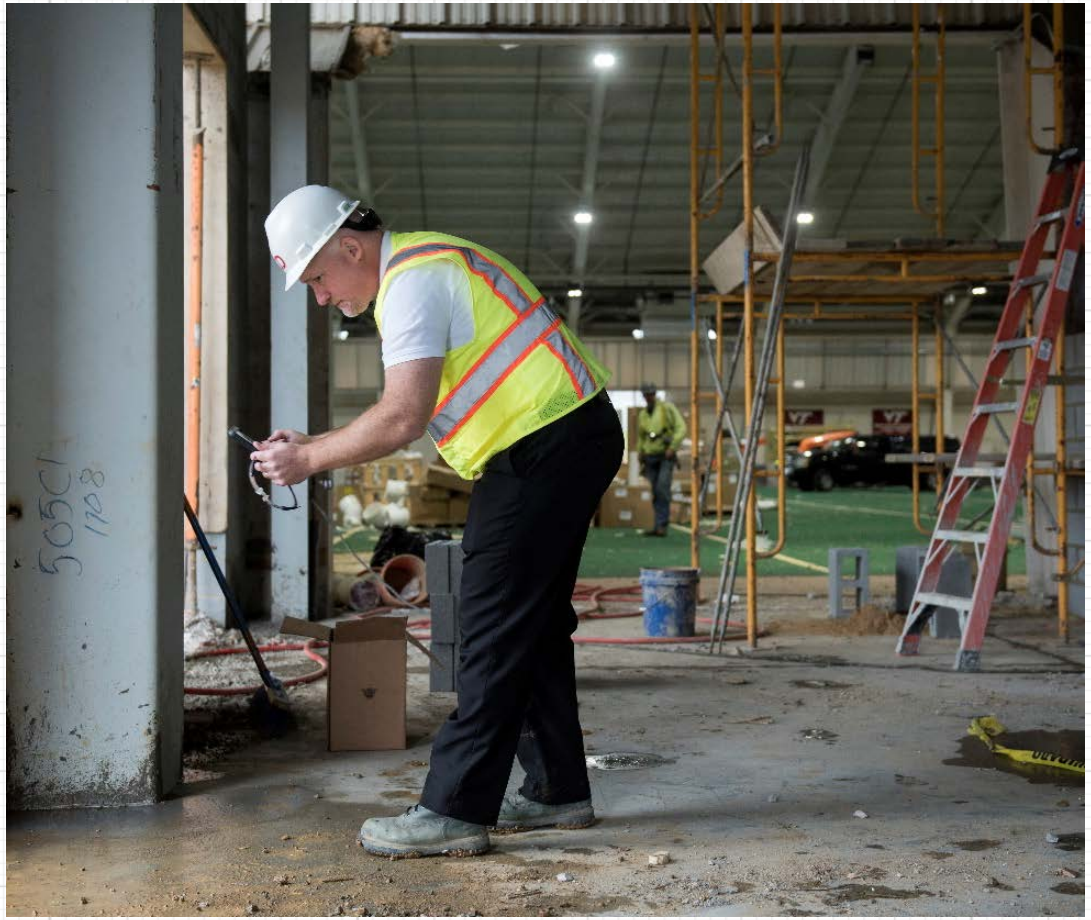
(Began April 18th)

119 Reviews Completed

100 Permits Issued

UBO: SUMMARY

- Ensure our buildings are safe, accessible, and code compliant.
- Help our clients achieve compliance in the least difficult way possible.



FACILITIES
VIRGINIA TECH

QUESTIONS?

FACILITIES
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Committee Minutes

COMPLIANCE, AUDIT, AND RISK COMMITTEE

110B Classroom Building, Virginia Tech
10:00 a.m.

June 3, 2018

Closed Session

Committee Members Present: Mr. Mehmood Kazmi (chair), Ms. Tish Long, Mr. Robert Mills Jr., Mr. Horacio Valeiras

Board Members Present: Mr. Mike Quillen, Mr. Dennis Treacy (rector)

VPI & SU Staff: Mr. Cyril Clarke, Mr. Brian Daniels, Mr. Ryan Hamilton, Ms. Kay Heidbreder, Ms. Sharon Kurek, Ms. Kim O'Rourke, Dr. Timothy Sands, Mr. M. Dwight Shelton Jr.

Compliance, Audit, and Risk Closed Session

1. **Motion for Closed Session:** Motion to begin closed session.

2. **Update on Fraud, Waste, and Abuse Cases:** The Committee received an update on outstanding fraud, waste, and abuse cases.

3. **Discussion with the Executive Director of Audit, Risk, and Compliance:** The Executive Director discussed audits of specific departments and units where individual employees were identified.

Open Session

Committee Members Present: Mr. Mehmood Kazmi (chair), Ms. Tish Long, Mr. Robert Mills Jr., Mr. Horacio Valeiras

Board Members Present: Mr. Mike Quillen, Mr. Dennis Treacy (rector), Dr. Hans Robinson (faculty representative), Mr. Robert Sebek (staff representative), Mr. Brett Netto (graduate student representative), Mr. Seyi Olusina (undergraduate student representative)

VPI & SU Staff: Mr. Lorenzo Amani, Ms. Beth Armstrong, Mr. Bob Broyden, Ms. Lori Buchanan, Dr. Cyril Clarke, Ms. Shelia Collins, Mr. Al Cooper, Mr. David Crotts, Mr. Brian Daniels, Dr. Lance Franklin, Mr. Ryan Hamilton, Ms. Kay Heidbreder, Ms. Rachel Iwicki, Ms. Sharon Kurek, Dr. Theresa Mayer, Ms. Erin McCann, Dr. Steve McKnight, Dr. Scott Midkiff, Mr. Ken Miller, Ms. April Myers, Ms. Kim O'Rourke, Dr. Patty Perillo, Dr. Scot Ransbottom, Mr. Mike Reinholtz, Dr. Timothy Sands, Ms. Savita Sharma, Mr. M. Dwight Shelton Jr., Ms. Dawn Taylor, Mr. Jon Clark Teglas, Mr. Steve Vantine, Ms. Tracy Vosburgh, Dr. Sherwood Wilson

Compliance, Audit, and Risk Open Session

1. **Motion to Reconvene in Open Session:** Motion to begin open session.

2. **Welcome and Introductory Remarks:** The chair of the Compliance, Audit, and Risk Committee provided opening remarks.

3. **Consent Agenda:** The Committee approved and accepted the items listed on the Consent Agenda.

    a. **Approval of Minutes of the March 25, 2018 Meeting:** The Committee reviewed and approved the minutes of the March 25, 2018 meeting.

    b. **Update of Responses to Open Internal Audit Comments:** The Committee reviewed the university's update of responses to all previously issued internal audit reports. As of December 31, 2017, the university had six open recommendations. Seven audit comments have been issued during the second quarter of the fiscal year. As of March 31, 2018, the university has addressed five comments, leaving eight open recommendations in progress.

    c. **Audit Plan Status Report:** The committee reviewed the Audit Plan Status Report. The Office of Audit, Risk, and Compliance (OARC) has completed 58 percent of its audit plan in accordance with the fiscal year 2017-18 annual audit plan.

    d. **Internal Audit Reports:** The following internal audit reports were issued by OARC since the March 25, 2018 meeting. Where applicable, management developed action plans to effectively address the issues in the report with a reasonable implementation timeframe. As noted above, OARC conducts follow-up on management's implementation of agreed upon improvements for previously issued audit recommendations.

i. Biochemistry: The audit received a rating of improvements are recommended. An audit recommendation was issued where opportunities for further improvement were noted in the area of laboratory safety training records. A low-priority audit recommendation of a less significant nature was issued where opportunities for further improvement were noted in the area of service center administration.

ii. Controller's Office – Risk Management: The audit received a rating of improvements are recommended. An audit recommendation was issued where opportunities for further improvement were noted in the area of insurance coverage. Additionally, observations for central administration were noted with respect to inaccurate Graduate Assistant (GAs) subsidies and payroll deductions, and to event management systems.

iii. IT: Mobile Device Security: This review began as a risk-based audit in accordance with the fiscal year 2017-18 audit plan; however, this review was truncated commensurate with the audit planning phase after it was determined that the best use of audit resources was to focus on other projects that had not received such a detailed previous review. A recommendation for continuous improvement was noted in the area of training and outreach related to mobile device security.

iv. Telecommunications Operations: The audit received a rating of improvements are recommended. An audit recommendation was issued where an opportunity for improvement was noted in the area of controls pertaining to the billing and work order system. Additionally, low-priority recommendations of a less significant nature were noted where opportunities for improvement were identified with regards to billing and rate discrepancies and safety training for Network Infrastructure & Services (NI&S) field technicians.

e. **Statewide Reviews and Special Reports:** This report is related to ongoing and forthcoming statewide reviews. Virginia Tech is subject to reviews by a variety of Commonwealth agencies, including the Auditor of Public Accounts, Office of the State Inspector General, and Virginia Department of Veterans Services.

4. **Annual External Audit Scope Discussion with the Auditor of Public Accounts:** The Committee met with the Auditor of Public Accounts (APA) for a

discussion of the scope of the audit of the 2018 financial statements and the APA's plans for conducting and completing the audit.

5. **Proposed Audit Plan for Fiscal Year 2018-19:** The Committee reviewed the proposed audits included on the fiscal year 2018-19 annual audit plan. OARC conducted the annual risk assessment after reviewing financial and operational data and seeking input from senior management. In addition, a university-wide information technology risk assessment and audit plan were created in accordance with industry standards. For fiscal year 2018-19, more than 20 audit projects are proposed given current staffing levels, with approximately 75 percent of available resources committed to the completion of planned projects.

6. **Enterprise Risk Management Program:** The Committee received an update on the Enterprise Risk Management (ERM) program. OARC developed a framework and facilitated its implementation over the previous months resulting in university leadership's identification of key residual risks across six thematic areas, documented in the enterprise risk landscape. An overview of a tabletop exercise related to enrollment management was shared with the committee.

7. **Institutional Compliance Program:** The Committee received an update on the institutional compliance program, which included the establishment of a compliance oversight committee to coordinate best practices regarding risk assessment and monitoring activities. OARC has distributed communication to key university constituents in establishing committee structures to help ensure collaboration and coordination among compliance activities at the university.

8. **Discussion of Future Topics:** The Committee discussed topics to be covered in future committee meetings.

There being no further business, the meeting adjourned at 11:42 a.m.

Update of Responses to Open Audit Comments

COMPLIANCE, AUDIT, AND RISK COMMITTEE

March 31, 2018

As part of the internal audit process, university management participates in the opening and closing conferences and receives copies of all final audit reports. The audited units are responsible for implementing action plans by the agreed upon implementation dates, and management is responsible for ongoing oversight and monitoring of progress to ensure solutions are implemented without unnecessary delays. Management supports units as necessary when assistance is needed to complete an action plan. As units progress toward completion of an action plan, the Office of Audit, Risk, and Compliance (OARC) performs a follow-up visit within two weeks after the target implementation date. OARC is responsible for conducting independent follow up testing to verify mitigation of the risks identified in the recommendation and formally close the recommendation. As part of management's oversight and monitoring responsibility, this report is provided to update the Compliance, Audit, and Risk Committee on the status of outstanding recommendations. Management reviews and assesses recommendations with university-wide implications and shares the recommendations with responsible administrative departments for process improvements, additions or clarification of university policy, and inclusion in training programs and campus communications. Management continues to emphasize the prompt completion of action plans.

The report includes outstanding recommendations from compliance reviews and audit reports. Consistent with the report presented at the March Board meeting, the report of open recommendations includes three attachments:

- Attachment A summarizes each audit in order of final report date with extended and on-schedule open recommendations.

- Attachment B details all open medium and high priority recommendations for each audit in order of the original target completion date, and with an explanation for those having revised target dates or revised priority levels.

- Attachment C charts performance in implementing recommendations on schedule over the last seven years. The 100 percent on-schedule rate for fiscal year 2018 reflects closing 23 of 23 recommendations by the original target date.

The report presented at the March 25, 2018 meeting covered audit reports reviewed and accepted through December 31, 2017 and included six open medium and high priority recommendations. Activity for the quarter ended March 31, 2018 resulted in the following:

Open recommendations as of December 31, 2017	6
Add: medium and high priority recommendations accepted March 25, 2018	7
Subtract: recommendations addressed since December 31, 2017	5
Remaining open recommendations as of March 31, 2018	8

While this report is prepared as of the end of the quarter, management continues to receive updates from OARC regarding auditee progress on action plans. Through May 4, 2018, OARC has closed two of the eight outstanding medium and high priority recommendations for an adjusted total of six open recommendations. The remaining open recommendations are progressing as expected and are on track to meet their respective target due dates. Management continues to work conjointly with all units and provides assistance as needed to ensure action plans are completed timely.

ATTACHMENT A

Open Recommendations by Priority Level

COMPLIANCE, AUDIT, AND RISK COMMITTEE

March 31, 2018

Report Date	Audit Name	Audit Number	Total Recommendations						
			ISSUED	COMPLETED	OPEN				
					Extended		On-schedule		Total
					High	Medium	High	Medium	Open
23-Aug-17	University Policy Review	17-1323	1					1	1
01-Feb-18	Biomedical Engineering and Mechanics	18-1367	1					1	1
02-Feb-18	Chemistry	18-1368	1					1	1
28-Feb-18	Vice President for Research and Innovation	18-1392	1					1	1
02-Mar-18	Fire Safety Compliance	18-1371	1					1	1
08-Mar-18	College of Engineering	18-1388	1					1	1
09-Mar-18	VCE Central District	18-1382	2					2	2
Totals:			**8**	**0**	**0**	**0**	**0**	**8**	**8**

ATTACHMENT B

Open Audit Recommendations

COMPLIANCE, AUDIT, AND RISK COMMITTEE

March 31, 2018

Report Date	Item	Audit Number	Audit Name	Recommendation Name	Priority		Target Date		Follow Up Status	Status of Recommendations with Revised Priority / Target Dates
					Original	Revised	Original	Revised		
02-Feb-18	1	18-1368	Chemistry	Oversight of Lab Safety Training	Medium		02-Apr-18		1	
01-Feb-18	2	18-1367	Biomedical Engineering and Mechanics	Oversight of Lab Safety Training	Medium		30-Apr-18		1	
09-Mar-18	3	18-1382	VCE Central District	Fiscal Responsibility	Medium		15-Jun-18		1	
09-Mar-18	4	18-1382	VCE Central District	Funds Handling	Medium		15-Jun-18		1	
08-Mar-18	5	18-1388	College of Engineering	Fiscal Responsibility	Medium		29-Jun-18		1	
23-Aug-17	6	17-1323	University Policy Review	Policy Governance Strategy	Medium		30-Jun-18		1	
02-Mar-18	7	18-1371	Fire Safety Compliance	Fire Evacuation Drills	Medium		02-Jul-18		2	
28-Feb-18	8	18-1392	Vice President for Research and Innovation	Fiscal Responsibility	Medium		30-Aug-18		2	

Follow Up Status

1 As of March 31, 2018, management confirmed during follow up discussions with the Office of Audit, Risk, and Compliance (OARC) that actions are occurring and the target date will be met. OARC will conduct testing after the due date to confirm that the Management Action Plan is implemented in accordance with the recommendations.

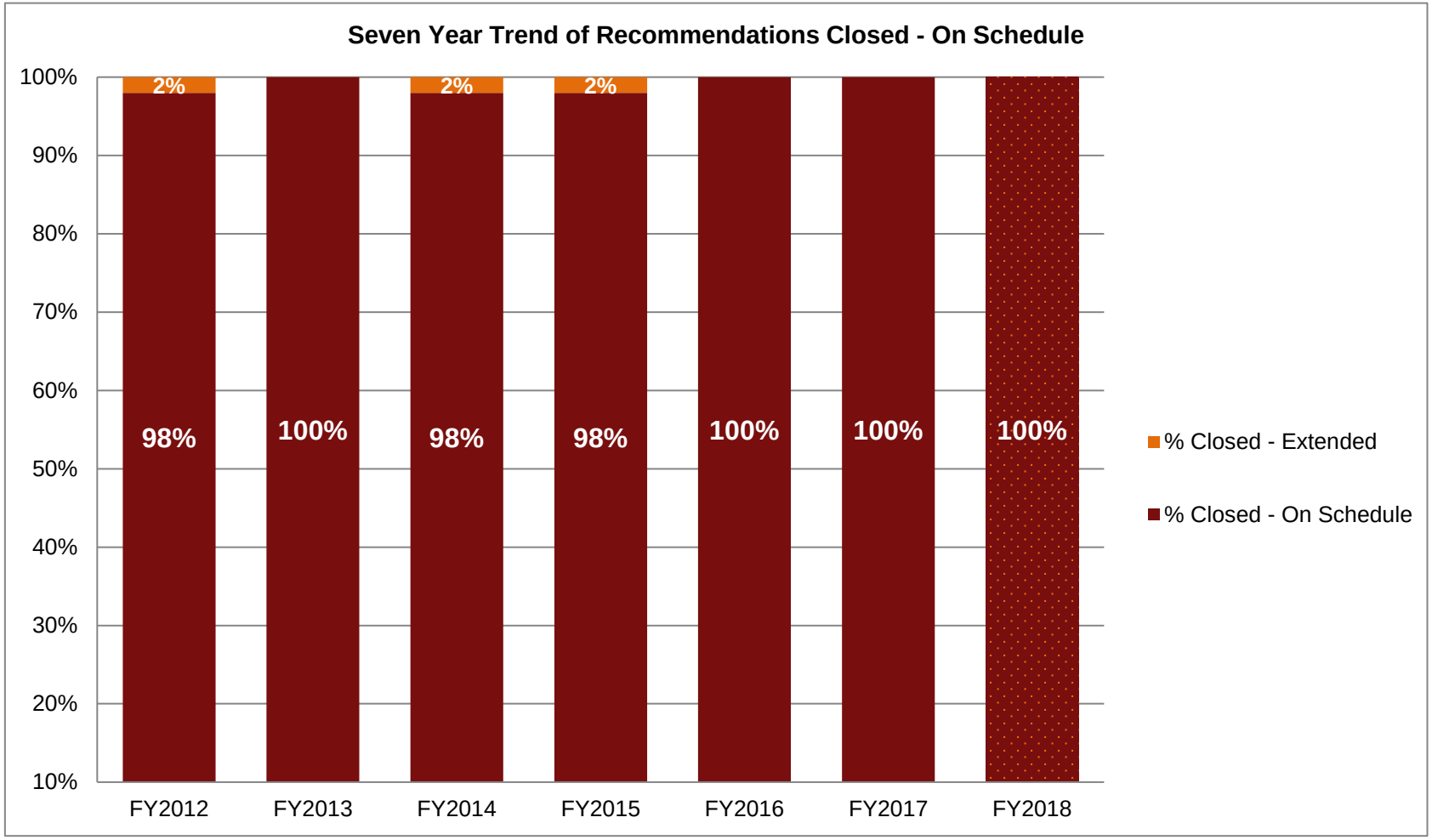
2 Target date is beyond current calendar quarter. Management has follow-up discussions with the auditor to monitor progress, to assist with actions that may be needed to meet target dates, and to assess the feasibility of the target date.

ATTACHMENT C

Management Performance and Trends Regarding
Office of Audit, Risk, and Compliance Recommendations

COMPLIANCE, AUDIT, AND RISK COMMITTEE

March 31, 2018



Presentation Date: June 3, 2018

Audit Plan Status Report

COMPLIANCE, AUDIT, AND RISK COMMITTEE

June 3, 2018

Audit Plan Update

Audits were performed in accordance with the fiscal year 2017-18 annual audit plan at a level consistent with the resources of the Office of Audit, Risk, and Compliance (OARC). Four risk-based audits have been completed since the March board meeting.

Due to personnel turnover and position vacancies held due to budgetary constraints, eight risk-based audits have been canceled or deferred to next fiscal year since we last met, including Biocomplexity Institute of Virginia Tech, Human Resources: Benefits, Hume Center, IT: Third Party Access to University Data, IT: Windows Server Security, Office of International Research Education and Development, School of Public and International Affairs, and University Registrar. Four advisory projects, Government Relations, Fair Labor Standards Act Practices, Title IX Program Policies and Procedures, and Youth Protection Activities, have been canceled or deferred as well.

The following six audit projects are underway: Global Activities, IT: Employee Access Lifecycle, University Scholarships and Financial Aid, Utilization of Endowed Professorship, Department of Athletics compliance review, and Vice President for Advancement compliance review. Additionally, four advisory service projects, requested by management in the areas of Facilities and Administrative Charge Utilization, the Steger Center for International Scholarship, Club Sports, and the Virginia Tech Carilion School of Medicine, are underway.

So far in fiscal year 2017-18, OARC has completed 58 percent of its amended audit plan as depicted in Exhibit 1. While we had 42 projects on the audit plan during the year, we have had to defer or cancel 16 projects (38%) due to seven vacancies equivalent to over 4,500 hours of audit effort.

Exhibit 1
FY 2017-18 Completion of Audit Plan

Audits	
Total # of **Audits** Planned	34
Total # of Supplemental **Audits**	1
Total # of Carry Forwards	7
Total # of Planned **Audits** Deferred and/or Canceled	16
Total **Audits** in Plan as Amended	26
Total **Audits** Completed	15
Audits - Percentage Complete	58%
Audits - Percentage Complete or Underway	96%
Note: Includes Compliance Reviews and Advisory Services	

Internal Audit Reports

COMPLIANCE, AUDIT, AND RISK COMMITTEE

June 3, 2018

Background

This report provides a summary of audit ratings issued this period and the full rating system definitions. The following reviews have been completed during this reporting period. The Office of Audit, Risk, and Compliance has made a concerted effort to ensure progress on the annual audit plan.

Consent Agenda Reports	Rating
Biochemistry	Improvements are Recommended
Controller's Office – Risk Management	Improvements are Recommended
IT: Mobile Device Security	N/A*
Telecommunications Operations	Improvements are Recommended

*A memorandum was issued to highlight recommendations for continuous improvement after truncation of the project based on results of initial project phases.

Summary of Audit Ratings

The Office of Audit, Risk, and Compliance's rating system has four tiers from which to assess the controls designed by management to reduce exposures to risk in the area being audited. The auditor can use professional judgment in constructing the exact wording of the assessment in order to capture varying degrees of deficiency or significance.

Definitions of each assessment option

Effective – The audit identified opportunities for improvement in the internal control structure, but business risks are adequately controlled in most cases.

Improvements are Recommended – The audit identified occasional or isolated business risks that were not adequately or consistently controlled.

Significant or Immediate Improvements are Needed – The audit identified several control weaknesses that have caused, or are likely to cause, material errors, omissions, or irregularities to go undetected. The weaknesses are of such magnitude that senior management should undertake immediate corrective actions to mitigate the associated business risk and possible damages to the organization.

Unreliable – The audit identified numerous significant business risks for which management has not designed or consistently applied controls prior to the audit. Persistent and pervasive control weaknesses have caused or could cause significant errors, omissions, or irregularities to go undetected. The weaknesses are of such magnitude that senior management must undertake immediate corrective actions to bring the situation under control and avoid (additional) damages to the organization.

RECOMMENDATION:

That the internal audit reports listed above be accepted by the Compliance, Audit, and Risk Committee.

June 3, 2018

Statewide Reviews and Special Reports

COMPLIANCE, AUDIT, AND RISK COMMITTEE

June 3, 2018

Background

Virginia Tech is subject to reviews by a variety of Commonwealth agencies, including the Auditor of Public Accounts (APA), the Office of the State Inspector General (OSIG), and others. In addition to the annual audits of the university's financial statements and its Intercollegiate Athletics program conducted by the APA, Virginia Tech has been included along with other agencies in statewide reviews typically included as part of an agency's annual work plan. Due to the breadth of the programs and the dollar volume of activities at Virginia Tech, the university is often selected for inclusion in a variety of statewide reviews. The following report provides an analysis of statewide audit activities consistent with the university's planned approach to manage and report on these audit activities.

OSIG Chemical Inventory Management

In accordance with the Code of Virginia § 2.2-309 [A](10), OSIG conducts performance audits of executive branch state agencies, including colleges and universities, to ensure state funds are spent as intended and to evaluate the efficiency and effectiveness of programs. As previously reported, most recently at the March meeting, all higher education institutions, including Virginia Tech, were originally notified that OSIG will conduct a performance audit at a sampling of Virginia's colleges and universities during fiscal year 2018. Virginia Tech, among others, was notified in February 2018 of its inclusion for the planning phase of this project centered on chemical inventory management. Virginia Tech subsequently responded to a detailed survey provided by OSIG and will continue to engage in the process as additional communication is received.

Virginia Department of Veterans Services (DVS)

Virginia Tech received notice of its selection in a Compliance Survey, which will be conducted to ensure that schools, training establishments, and their approved courses are in compliance with all applicable provisions of the laws administered by the U.S. Department of Veterans Affairs and State Approving Agency (DVS). This limited scope review will monitor compliance based on a review of records for a specific set of students.

Annual APA Financial Statement Audit

The entrance conference was held with the APA in May for the upcoming annual financial statement audit. The objectives of this APA review include ensuring:

- The financial statements present fairly the financial position, the changes in financial position, and the cash flows for fiscal year 2017-18 in conformity with accounting principles generally accepted accounting principles;
- Disclosures in the financial statements are adequate and fairly stated;
- Management has appropriately reviewed the financial statements, accruals, adjustments and disclosures;
- Adequate internal controls exist over material account balances and transactions;
- and, the University is in compliance with applicable laws, regulations, and provisions of contracts or grant agreements.

The APA encourages the Board of Visitors to provide input regarding the risks they perceive to the University in completing its mission. The Board members can direct their comments to the Audit Committee Chair or Executive Director of Audit, Risk, and Compliance to be forwarded to the APA Project Manager.

Auditor of Public Accounts
Audit Engagement Memorandum
Virginia Tech – Compliance, Audit and Risk Committee
June 3, 2018

- APA Audit Management
  - J. Michael Reinholtz, Project Manager (mike.reinholtz@apa.virginia.gov)
  - Meghan Finney, Auditor In-Charge (meghan.finney@apa.virginia.gov)

- Audit Period – July 1, 2017 through June 30, 2018

- Audit Deadline – November 2018

- Audit Objectives, to ensure:
  - The financial statements present fairly the financial position, the changes in financial position, and the cash flows for the 2018 fiscal year in conformity with accounting principles generally accepted in the United States of America.
  - Disclosures in the financial statements are adequate and fairly stated.
  - Management has appropriately reviewed the financial statements, accruals, adjustments and disclosures.
  - Adequate internal controls exist over material account balances and transactions.
  - The University is in compliance with applicable laws, regulations, and provisions of contracts or grant agreements.

- Discussion of Risk
  - The APA encourages the Board of Visitors to provide input regarding the risks they perceive to the University in completing its mission. The Board members can direct their comments to the Audit Committee Chair or the Internal Audit Director to be forwarded to the APA Project Manager.

Terms of the Engagement

The Auditor's (APA) Responsibilities

Overall Audit Objectives

The objective of our audit is the expression of opinions as to whether your basic financial statements are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles. We will conduct our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and standards for financial audits contained in the *Government Auditing Standards*. The audit of the financial statements does not relieve management or those charged with governance of their responsibilities.

Audit Procedures-General

An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We will plan and perform the audit to obtain reasonable, rather than absolute assurance, about whether the financial statements are free of material misstatement whether from (1) errors, (2) fraudulent financial reporting, (3) misappropriation of assets, or (4) violations of laws or governmental regulations that are attributable to the entity or to acts by management or employees acting on behalf of the entity. Because the determination of abuse is subjective, *Government Auditing Standards* do not expect auditors to provide reasonable assurance of detecting abuse.

Because of the inherent limitations of an audit, together with the inherent limitations of internal control, an unavoidable risk that some material misstatements may not be detected exists, even though the audit is properly planned and performed in accordance with GAAS and *Government Auditing Standards*.

Audit Procedures-Internal Control and Compliance

Our audit will include obtaining an understanding of internal controls, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. An audit is not designed to provide assurance on internal control or to identify significant deficiencies or material weaknesses. However, we will communicate in writing to management and those charged with governance any significant deficiencies or material weaknesses in internal control relevant to the audit of the financial statements that we have identified during the audit. Also, as part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of compliance with the provisions of applicable laws, regulations, contracts, agreements, and grants

Those charged with governance

We are responsible for communicating significant matters related to the financial statement audit that are, in the auditor's professional judgment, relevant to the responsibilities of those charged with governance in overseeing the financial reporting process. GAAS do not require the auditor to design procedures for the purpose of identifying other matters to communicate with those charged with governance.

Management's Responsibilities

Our audit will be conducted on the basis that Management acknowledge and understand that they have the following responsibilities:

- Preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America
- Design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error
- Identify and ensure compliance with applicable laws, regulations, contracts, and grant agreements
- Informing the APA about all known or suspected fraud affecting the entity involving (1) management, (2) employees who have significant roles in internal control, and (3) others where the fraud could have a material effect on the financial statements
- Informing the APA (and others as required by the Code of Virginia § 30-138) of knowledge of any allegations of fraud or suspected fraud affecting the University received in communications from employees, former employees, regulators, or others
- As received, forward copies of each federal audit performed on agency or institution programs or activities to the Auditor of Public Accounts as required by Chapter 836 § 4-8.02 a. of the 2017 Virginia Acts of Assembly. To forward these reports to the Auditor of Public Accounts, use APAFederal@apa.virginia.gov. If the federal report is only available in hardcopy or contains FOIA exempt information, DO NOT email the report, use this same email account to notify the Auditor of Public Accounts of the federal report and provide the contact information of the individual with the report
- Informing the APA of any potential documents that are FOIA exempt
- Ensuring that management is reliable and financial information is reliable and properly recorded
- Making all financial records and related information available to the APA
- Providing the APA with (1) access to all information of which you are aware that is relevant to the preparation and fair presentation of the financial statements, (2) additional information that we may request for the purpose of the audit, and (3) unrestricted access to persons within the government from whom we determine it necessary to obtain audit evidence
- Responding to audit findings and recommendations, as well as providing your planned corrective actions and the timing and format for providing that information
- Providing the APA at the end of the audit with a written letter confirming certain representations made during the audit

- Adjusting the financial statements to correct material misstatements and providing the APA with a representation that the effects of any uncorrected misstatements are immaterial, both individually and in the aggregate, to the financial statements taken as a whole
- Preparation of the supplementary information in conformity with U.S. generally accepted accounting principles. You agree to include our report on the supplementary information in any document that contains and indicates that we have reported on the supplementary information. Your responsibilities include acknowledging to us in the written representation letter that (1) you are responsible for presentation of the supplementary information in accordance with GAAP; (2) that you believe the supplementary information, including its form and content, is fairly presented in accordance with GAAP; (3) that the methods of measurement or presentation have not changed from those used in the prior period (or, if they have changed, the reasons for such changes); and (4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

Audit Committee Responsibilities

- Communicate with APA about audit scope
- Communicate with management and internal audit regarding progress
- Receive reports and findings from management and external audit

Other Elements of the audit process:

Overall planned scope of the audit

Approach to internal control – We review internal controls to identify those areas where we can replace substantive testing with transactional testing. We look for management to have written formal policies and procedures and check for the implementation of those procedures.

Concept of materiality – We do not review all transactions or accounts in detail. We use materiality to focus our work on those financial statement line items and those transactions that are material or significant to the University.

Identification of potential fraud risks

Approach to fraud – Most of our audit is focused on our opinion on the financial statements and materiality. Our primary interest related to fraud would be in how it may affect the financial statements and those controls that the financial statements rely upon. The audit is not designed to detect error or fraud that is immaterial to the financial statements. However, we review policies and procedures for fraud risk and may direct our testwork towards addressing fraud risk.

Responsibility for identifying fraud risks and fraud – Auditing standards require us to assess fraud risk, interview management and staff about their knowledge of fraud and fraud risk, and review exceptions for indications of possible fraudulent transactions. Auditors should be looking for red flag fraud

indicators. Even though government entities are not always profit oriented, the auditors remain vigilant about financial statement fraud.

Report fraudulent transactions as required by Code of Virginia § 30-138 Agencies are responsible for reporting circumstances that suggest a reasonable possibility that a fraudulent transaction has occurred involving funds or property under their control, where an officer or employee of the state or local government may be involved. Items should be reported to the Auditor of Public Accounts, the State Inspector General, and the Superintendent of State Police.

Audit Reporting

We will issue a written report upon completion of our audit of the University's financial statements. We will make reference to the Component Auditor's audit of Virginia Tech Foundation, Inc. and Virginia Tech Services Inc. in our report on the University's financial statements. Our report will be addressed to the Board of Visitors of the University. We cannot provide assurance that an unmodified opinion will be expressed. Circumstances may arise in which it is necessary for us to modify our opinion or add an emphasis-of-matter or other-matter paragraph(s). If our opinions on the financial statements are other than unqualified (unmodified), we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed opinions, we may decline to express opinions or to issue a report as a result of this engagement.

We will also provide a report (that does not include an opinion) on internal control related to the financial statements and compliance with the provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a material effect on the financial statements as required by *Government Auditing Standards.* The report on internal control and compliance will include a statement that the report is intended solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Audit Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Virginia Tech

Office of Audit, Risk, and Compliance
Fiscal Year 2018-19 Audit Plan
June 3, 2018

OVERVIEW

The Office of Audit, Risk, and Compliance (OARC) conducts risk-based assurance engagements, compliance reviews, management advisory services, and investigations. The risk-based assurance engagement is an objective examination of evidence to provide an independent assessment of governance, risk management, and the control systems within the university. The objective of the policy compliance review is to ensure all senior management areas (even low risk) receive periodic reviews from OARC every five years to perform tests of compliance with major university business policies. The nature and scope of management advisory service activities, developed through agreement with the client, add value and improve the university's governance, risk management, and control processes without the internal auditor assuming management responsibility.

RISK ASSESSMENT PROCESS

Enterprise Risk Assessment (ERM)

The university began a new Enterprise Risk Management (ERM) initiative during fiscal year 2017-18 to provide enhanced visibility into the university's risks and align strategic planning with the resulting risk awareness. OARC began facilitating the ERM program by working with university leadership to establish the framework for collectively identifying and assessing risks across the enterprise. The ERM program will ultimately strengthen the university's ability to achieve its mission and strategic objectives by:

- Obtaining a holistic view of the most critical risks to the achievement of Virginia Tech's mission and objectives;
- Creating a risk-aware culture, including the management of risks to an appropriate level of risk tolerance;
- Improving focus and perspective on both internal and external risks and opportunities, including emerging risks and value drivers;
- Enhancing decision making and alignment with strategic goals; and
- Improve efficiency and optimized allocation of resources through risk prioritization.

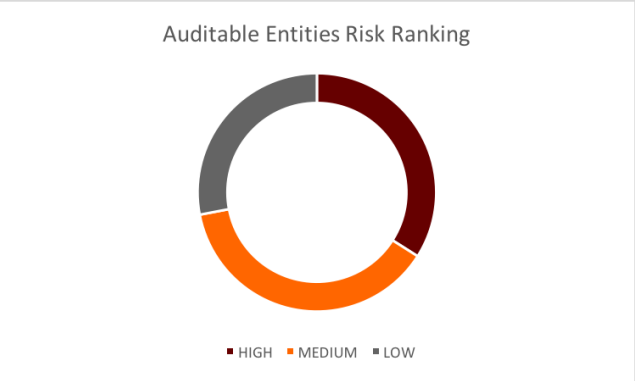
University leadership provided feedback for the initial ERM process by assessing the risks in terms likelihood of occurrence, significance of impact, and the velocity of onset, all grouped by the categories depicted below:

ERM RISK CATEGORIES	ALTITUDES OF RISK
Strategic	Systemic and Existential
Financial	Institutional
Compliance	Unit-Level
Operational	
Reputational	

In order to maximize efficiency and engagement from university senior leadership, OARC leveraged this complimentary process as an element of the traditional annual risk assessment in support audit plan development.

OARC Audit Planning Risk Assessment

University departments and administrative operations were grouped into approximately 175 auditable entities or responsibility centers based on common missions and the existing organizational structure. For each auditable entity, OARC reviewed financial data, including expenditures, revenues, cash receipts, federal contracts and grants, and total employees.



The relative business risk was assessed on a judgmental basis for the following qualitative and quantitative factors.

RISK FACTORS
Quality and Stability of Control Environment
Business Exposure (Materiality and Liquidity of Operational Resources)
Public and Political Sensitivity
Compliance Requirements
Information Technology and Management Reporting

Elements considered within these factors included:

- Management's awareness of internal controls;
- Stability and expertise of management;
- Interval since the last audit review;
- Complexity of operations and technology applications;
- Materiality or financial impact to the university;
- Potential impact to reputation;
- Impact of noncompliance with internal and external policy, procedure, regulatory, and statutory requirements; and
- Reliance on information and management reporting for operating decisions, monitoring performance, providing services, and allocating resources.

The chart depicts the results of the risk assessment classifications. The risk assessment results were consistent with previous risk assessments conducted by OARC.

IT Risk Assessment

OARC has also created a university-wide information technology (IT) risk-based audit plan mapped to the ISO 27002 standard, a best practice for developing and maintaining enterprise-wide IT security that is also references by university policies. OARC consulted with key IT personnel to ensure that audit coverage is maximized and properly targeted.

The assessment of IT and business operations at the university identified four high-level risk domains intended to encapsulate the vast majority of the systems and computing environments within the university as follows:

- Student Systems;
- Finance and Administrative Systems;
- Human Resources Systems; and
- Research Systems.

The IT audit approach includes a variety of topical audits to gain a better understanding of the university-wide environment instead of narrowly focusing on the performance of individual departments. This approach also allows OARC to maintain current knowledge of the IT security and operating conditions in a dynamic industry through the constant evaluation and reassessment of planned audit engagements.

CORE AUDIT PLAN

OARC has identified certain critical areas for inclusion in the core audit plan to ensure that adequate coverage is provided over a reasonable time. To obtain additional insight and validate the plan, one-on-one discussions were conducted with senior leadership to identify reputation factors, regulatory changes, organization shifts, new initiatives, and deployment of new systems or technology tools.

The critical areas for core audit plan inclusion are:

- Academic Units
- Auxiliary Enterprises and Athletics
- Campus Safety and Security
- Enrollment Services
- Facilities and Operations
- Financial Management
- Human Resources
- Information Technology
- Off-Campus Locations
- Research
- Student Services

The core audit plan includes several multi-year audits that will allow for annual reviews of selected components of the entities with high external compliance risk and complex operations. These entities are University Scholarships and Financial Aid, Research, Human Resources, and Intercollegiate Athletics.

FISCAL YEAR 2018-19 AUDIT PLAN

The audit plan focuses on delivering value to Virginia Tech with an emphasis on the following risk areas: strategic, operational, financial, compliance, and IT. If new topics emerge during the audit plan period that require more immediate attention, reconfiguration of the plan can be undertaken to accommodate these changes. OARC's goal is to complete 85 percent of the audit plan. As each audit is undertaken, risks will be re-evaluated to ensure proper audit coverage with consideration of confidentiality,

integrity, and availability. Annual expenditures and revenues referenced below reflect fiscal year 2016-17 data unless otherwise noted.

At the direction of the Board of Visitors, significant effort has gone in to the development of a more senior staff within the internal audit function. This effort has been generally successful; however, budgetary considerations have not necessarily kept pace with these efforts. This factor, combined with the continued general migration of audit staff to promotional opportunities in management across the university, requires the Draft Audit Plan to be tempered. As such, you will see the 21 projects we have on the audit plan for this year, as well as 8 projects that would have been included on the plan if the office were able to maintain its prior staffing levels.

Risk-Based Assurance

Planned Engagement	Overview	Risk Area
Athletics *	The Department of Athletics (Athletics), with 22 varsity sports at the NCAA Division I level, monitors and supports more than 550 student-athletes each academic year. Athletics had operating revenues of approximately $87.4 million and total operating expenses of approximately $90.7 million. The Office of Audit, Risk, and Compliance conducts various components of a complete audit of Athletics over a five-year period.	Compliance – Athletics
Americans with Disabilities Act (ADA) Compliance	Virginia Tech is committed to equal opportunity in employment and education for individuals with disabilities and complies with the Americans with Disabilities Act, as amended, and Section 504 of the Rehabilitation Act of 1973. ADA and Accessibility Services consults with colleges and departments both on and off campus to ensure equal opportunity for individuals with disabilities. Employees with disabilities may be entitled to reasonable accommodations under Title 1 of the Americans with Disabilities Act. Given the applicability to students, the Services for Students with Disabilities office also has a role in helping to ensure reasonable accommodations and ADA compliance. ADA compliance has not previously received a focused review.	Compliance – Human Resources and Student Services
Human Resources: Benefits*	Human Resources administers the commonwealth benefits program and provides benefit management and guidance for approximately 7,500 faculty and staff. The benefits program is an integral part of the university's employee compensation package and includes health insurance, leave, legal resources, retirement plans through the Virginia Retirement System, tuition assistance, and workers compensation. This function was last reviewed in 2011.	Operational – Human Resources
Hume Center	The mission of the Ted and Karyn Hume Center for National Security and Technology (Hume Center) is to cultivate the next generation of national security leaders by developing and executing curricular, extracurricular, and research opportunities to engage students. Jointly operating in the National Capital Region and the Blacksburg campuses, Hume Center research activities principally focus on cybersecurity, resilience, and autonomy challenges faced by the national security and homeland security communities. While not officially established in its current format until 2010, organizational oversight of the Hume Center has transitioned several times since inception. Research expenditures	Operational – Research

Planned Engagement	Overview	Risk Area
	totaled approximately $6.6 million. Elements of the Hume Center's activity have been previously reviewed; however, there has not yet been a focused audit.	
IT: Controlled Unclassified Information (CUI) and Secure Research Environment (SRE)	CUI is defined as information that requires safeguarding or dissemination controls pursuant to and consistent with applicable law, regulations, and government-wide policies but is not deemed as classified. The federal security requirements apply only to components of nonfederal systems that process, store, or transmit CUI when it resides in nonfederal systems and/or organizations such as Virginia Tech. The offices of Collaborative Computing Solutions within the Division of IT and the Office of Export and Secure Research Compliance within the Division of Research and Innovation jointly developed the SRE to allow for sponsored research projects working with covered data sets to be processed, stored, and transmitted with appropriate and required security considerations in place. Although a previous advisory review was done during the establishment of this project, a dedicated review has not yet occurred.	Compliance – Research
IT: Industrial Control Systems	Industrial Control Systems (ICS) is a general term that encompasses several types of systems and instrumentation related to industrial processes. At Virginia Tech, this may include operations related to power generation and distribution among other areas. Given the growing complexity of industrial environments, it is important that organizations make an effort to adequately protect against digital threats. Doing so requires a multi-step approach that focuses on network security, server security, and device-level security. ICS has not previously received a dedicated review.	Information Technology
IT: Third-Party Access to University Data	In addition to mandatory submission of data to third parties, the university has procured entire systems and services through outsourcing agreements to host and process institutional data. Examples include an outsourced e-commerce system for procuring goods or services and systems intended to meet federal immigration requirements. In addition to these high-visibility centrally purchased systems, there may be departmental systems outside of the university environment that may have highly sensitive data, yet have not been approved by central administration due to long-term existence or relatively low financial impact. This audit is intended to identify and review the security of university data in outsourced systems as well as other third-party vendor access to data. The outsourced environment was last audited in 2013.	Information Technology
Maintenance Reserve	Maintenance Reserve work is described as any major repair or replacement with a cost of $25,000 to $1 million to a fixed component of existing physical plant or property intended to extend the useful life of an asset in its current form. The first priority of Maintenance Reserve is to maintain the integrity of a building envelop to prevent intrusion of weather and natural elements, which can quickly destroy a building beyond repair when allowed to progress unchecked. Thus, repairs of roofs, windows, and building skin are considered the first priority for the use of these resources. Maintenance Reserve projects are generally not intended to enhance, upgrade, or otherwise improve plant, property, or equipment. Maintenance Reserve is a significant	Operational – Facilities

Planned Engagement	Overview	Risk Area
	activity at the university, with more than $27 million allocated from the commonwealth budget process over the current biennium. This activity has not previously received a dedicated review.	
Office of the University Bursar	The Office of the University Bursar (OUB) has the responsibility of providing timely and accurate billings to students and general users of the university's services and ensuring that payments and credits are received and properly applied to each customer's account in a timely manner. The specific responsibilities of this department include: providing timely and accurate billings to students and general users of the university's services and ensuring that payments and credits are received and properly applied to each customer's account in a timely manner, receipt and timely application of all other cash payments made to the university, disbursement of payroll, all university payables, Perkin's loan fund repayment, collection of delinquent accounts and notes receivable, and administration of the Budget Tuition Program. The Office of the University Registrar also partners closely with University Scholarships and Financial Aid in the administration of scholarships for students. The last audit of OUB was in 2012.	Financial – Financial Management
Research: Grant Management *	In addition to safety and other compliance matters, the university's research portfolio requires significant fiscal oversight and management. Principal Investigators (PIs) are responsible for monitoring the day-to-day fiscal performance and technical progress of their sponsored award. Proper monitoring practices for PIs include: assuring salaries and equipment are charged accurately, tracking budget reports carefully, noting any restrictions placed by the sponsor on the expenditure of awarded funds. Additional considerations requiring active management and oversight from PIs and their departments include cost sharing, which is a financial commitment by the university to share in the funding of a sponsored activity. Various elements of this topic have been included in various distributed reviews, but this broad centralized approach will leverage data analysis in a manner not previously conducted.	Financial – Research
Research: Subrecipient Monitoring *	The Office of Sponsored Programs functions as the steward of Virginia Tech's research portfolio and is responsible for ensuring that all research proposals and projects comply with university, federal, and sponsor regulations, policies, and procedures. A Subrecipient refers to a recipient that receives a subaward or subcontract from a pass-through entity to carry out part of a program. Subrecipient monitoring guidelines and responsibilities are shared among PIs, departmental administrators, OSP personnel, and the OSP Subrecipient Monitoring Committee. This topic is a significant federal compliance area requiring close attention to ensure compliance and avoid significant financial or other penalties. This topic has not previously received a targeted review.	Compliance – Research
School of Public and International Affairs	The School of Public and International Affairs (SPIA), operating within the College of Architecture and Urban Studies, offers degree programs in the Center for Public Administration and Policy, Government and International Affairs, and Urban Affairs and Planning. Research initiatives are carried out by the Metropolitan Institute in the National Capital Region and the Institute for Policy	Operational – Academic

Planned Engagement	Overview	Risk Area
	and Governance at the Blacksburg campus. Total expenditures were approximately $9.2 million, while revenue was just over $2.2 million. SPIA has not previously received a dedicated review.	
Student Medical Insurance Reimbursement Program	The Student Medical Insurance office within Insurance and Risk Management has overseen the reimbursement of students related to overpayments for insurance premiums based on inflated rates charged to Virginia Tech students by third parties during the period of 2003-2011. Reimbursements have been based upon a percentage of each student's actual recorded payment toward their health insurance coverage. The university has worked with an outside entity to manage the repayment of affected individuals. This review will focus on the closeout of the reimbursement program.	Compliance – Financial Management
Title IX Compliance	Maintaining a campus free of sex discrimination, including sexual misconduct and sexual harassment, is important for all students and employees. Title IX of the Education Amendments (1972) prohibits discrimination on the basis of sex in any educational program or activity that receives federal financial assistance. Failure to comply with Title IX can include the termination of all or part of a university's federal funding. This includes grants, subsidies, and other program funds from the federal government. In addition to the loss of federal funds, universities may be sued by those seeking redress for violations of Title IX. It is essential that institutions receiving federal financial assistance operate in a nondiscriminatory manner. Although external reviews have occurred, this topic has not previously received a dedicated review.	Compliance – Campus Safety and Security
University Building Official	Virginia Tech has its own University Building Official serving as the authority having jurisdiction for projects governed by the Virginia Uniform Statewide Building Code and administered directly by the university on campus and the sites throughout the Commonwealth owned by the university. The Office of the University Building Official provides technical engineering and code related support and serves as the primary liaison with outside regulatory agencies, working closely with them on code issues that affect the design, construction, and ultimately the approval to occupy a new university facility or maintain existing facilities. The last dedicated review of this topic was in 2015.	Operational – Facilities
University Registrar	The Office of the University Registrar provides many services, including academic records maintenance for more than 33,000 current students across 250 undergraduate and graduate degree programs. Other areas of responsibility include data stewardship; data integrity; ensuring compliance with all agency, state, and federal regulations; and development of semester course offerings. The last dedicated review of this office was in 2012.	Operational – Enrollment Services
University Scholarships and Financial Aid*	The Office of University Scholarships and Financial Aid (USFA) supports the university's student access, enrollment, and retention goals by providing the financial means to encourage economic, social, cultural, and academic diversity in the student body. USFA provided or monitored approximately $462 million in student financial assistance. A complete audit of the various activities within USFA is performed over a four-year period.	Compliance – Enrollment Services

* Entity receives an annual audit on different components of their operation.

University Policy Compliance Reviews

OARC will continue its program of limited scope reviews of senior management areas. These surveys review major aspects of a department's administrative processes using internal control questionnaires and limited testing that provides broad audit coverage ensuring compliance with university policies on campus.

Planned Engagement	Overview	Risk Area
College of Agriculture and Life Sciences	The College of Agriculture and Life Sciences, with 12 academic departments and more than 2,700 students, offers a diverse range of degree programs ranging from an associate's program in Agricultural Technology to doctoral programs. CLAHS had $139.8 million in expenditures including $44.3 million in sponsored research. The last policy compliance audit of this area was in 2014.	Operational
Vice President and Dean for Graduate Education	The Virginia Tech Graduate School is responsible for the development, administration, and evaluation of graduate education throughout the university and administers all graduate degrees. The Graduate School currently offers more than 150 master's and doctoral programs for over 7,000 students at multiple locations throughout the Commonwealth of Virginia, through partnerships with the University of Maryland and Wake Forest University, and at several international sites. The last policy compliance audit of this area was in 2014.	Operational
Vice President for Student Affairs	The Division of Student Affairs is committed to the growth, development, and achievement of students at Virginia Tech. This organization works closely with academic colleagues to support students as they learn to be successful and effective leaders in the emerging global community. The division employs approximately 3,600 faculty and staff. The last policy compliance audit of this area was in 2014.	Operational

Management Advisory Services

Planned Engagement	Overview	Risk Area
School of Plant and Environmental Sciences	The School of Plant and Environmental Sciences will be a national and international leader for improving human well-being and quality of life through learning, discovery, and engagement in plant and environmental sciences. The school will integrate three existing departments that share certain mission elements: Crop and Soil Environmental Sciences; Horticulture; and Plant Pathology, Physiology, and Weed Science. These units, with $8 million in research and $23 million in total expenditures, already share cross-cutting interdisciplinary research and will be further connected through undergraduate curricula and linked graduate programs, as well as through statewide research, extension, and outreach activities. This review is intended to assess initial control structure for the operations of the new school as it continues establishment.	Operational – Academic
Youth Protection Activities	The university is committed to the safety and welfare of its students, employees, and visitors through the establishment of practices that support a safe and secure environment in all buildings and grounds owned, controlled, or leased by Virginia Tech, including satellite locations, as well as promoting safety through policies and programs. Administrators, employees, students, volunteers, and others working with minors (children under the age of 18) have a responsibility to promote their protection.	Operational – Campus Safety and Security

Special Projects and Annual Audit Activities

Activity	Overview
Special Projects	Investigate fraud, waste, and abuse allegations.
Annual Audit Activities (Follow-up, Inventory)	Conduct follow-up audit procedures to ensure that management is implementing controls as described within their responses to audit report recommendations. Assist management with year-end inventory counts for financial statement verifications.
External Audit Coordination	Manage and serve as the liaison for all external audit services including contracted and regulatory-imposed audits.
Quality Assurance	OARC will undergo a mid-cycle review of its Quality Assurance and Improvement program to assess operations and practices with applicable standards. Additional effort will go into internal assessment to ensure the most effective and efficient procedures are in place and identify means of improving overall performance.

ADDITIONAL AUDIT COVERAGE PENDING RESOURCES

With additional resources, the following projects would have been included for the fiscal year 2018-19 audit plan. Otherwise, these projects will be considered for inclusion on the fiscal year 2019-20 plan.

Planned Engagement	Overview	Risk Area
College of Natural Resources and Environment	The College of Natural Resources and Environment (CNRE) is comprised of four academic departments containing eight undergraduate majors and is the only college specializing in natural resource education, research, and outreach in Virginia. CNRE had expenditures of $33.9 million including $16.5 million in sponsored research. The last policy compliance audit of this area was in 2014.	Operational
Contract Approval and Delegated Authority	The Vice President for Finance and Chief Financial Officer is designated as the university's Chief Contracting Officer by the Board of Visitors, but has also been authorized to delegate signature authority. All contractual agreements must be reviewed by University Legal Counsel prior to execution, and may also require a review from the IT Security Office. University policy delegates to department heads the authority to enact purchases of goods and services valued up to $2,000 per transaction. Department heads are responsible for the correct exercise of delegated purchasing authority and must ensure that personnel are properly trained and supervised, that all rules and procedures are followed, and that prices being paid are fair and reasonable. A focused review of this topic had not previously been conducted.	Financial – Financial Management
Eastern Shore AREC	Virginia Tech's Eastern Shore Agricultural Research Extension Center (AREC) is committed to supporting commercial vegetable and agronomic crop production. The center sits on a 226-acre farm that hosts an office complex, laboratories, equipment buildings, garages, a greenhouse, graduate student housing, a large freshwater pond, and woodland areas. More than 25 agricultural crops are grown annually for research and extension studies. This unit has not previously received a dedicated review.	Operational – Off-Campus Locations
GDPR	The General Data Protection Regulation (GDPR) (EU) 2016/679 is a regulation in EU law on data protection and privacy for all individuals within the European Union. It addresses the export of personal data outside the EU. This advisory review will develop a	Compliance – Information Technology

Planned Engagement	Overview	Risk Area
	more complete understanding of the applicability and impact to the university and assess the continuing efforts by various university constituents.	
Graduate Education	The Virginia Tech Graduate School is responsible for the development, administration, and evaluation of graduate education throughout the University, and administers all graduate degrees. The Graduate School currently offers more than 150 master's and doctoral programs for over 7,000 students at multiple locations throughout the Commonwealth of Virginia, through partnerships with the University of Maryland and Wake Forest University, and at several international sites. The last dedicated review was in 2013.	Operational – Enrollment Services
IT: Windows Server Security	Servers are used widely to perform a variety of tasks, from network attached file storage or collaborative database hosting to processing email or print requests. As such, servers often present significant risks when not properly secured. A large percentage of the university's servers operate on the Windows platform. Focus will be on Windows Server security across the university including distributed locations, in various administrative, academic, and research departments. Windows Server security was last audited in 2014.	Information Technology
Licensing and Trademarks	University Relations, within the Division of Advancement, promotes and protects the Virginia Tech brand through appropriate use of the university's trademarks. Licensing and Trademarks approves internal use of trademarks and administers a licensed collegiate merchandise program through a partnership with IMG Licensing. Licensing and Trademarks had revenues of $1.8 million and was last reviewed in 2009.	Financial – Auxiliary
Parking and Transportation	Virginia Tech has more than 16,400 parking spaces, a motorist assistance program, a fleet of approximately 300 vehicles, and a robust and award-winning alternative transportation program that includes daily shuttles from the Blacksburg campus to the Virginia Tech Carilion Research Institute in Roanoke as well as to the National Capital Region. In addition to the 33,000 students and 13,000 employees, an estimated 60,000 alumni, parents, and community members visit the campus each year. This area had $6.5 million in revenue and last received a dedicated review in 2014.	Operational – Auxiliary Enterprise

AUDIT RESOURCES

The audit plan for fiscal year 2018-19 is based on professional staffing of 11 full-time equivalents (FTEs). This is a reduced figure from prior years with two positions held vacant to cover other unfunded expenses, as relative seniority for audit staff has been prioritized when filling positions at the urging of the audit committee. Staffing will continue to be augmented by the continuation of the student internship program in which 2-3 Virginia Tech students are employed.

Approximately 75 percent of OARC's available resources are committed to the completion of planned audit projects, management advisory reviews, and investigations. The annual

audit plan is designed to provide appropriate coverage utilizing a variety of audit methodologies including audits of individual units, functional and process audits, university-wide reviews, and information system projects. OARC conducts follow-up audit procedures throughout the year to ensure that management is implementing controls as described within their responses to audit report recommendations.

Audit resources are allocated as follows:

- 52 percent of the OARC's available resources are committed to the completion of planned audit projects and follow-up audit procedures.
- 10 percent to accommodate requests from management and consultations with university departments.
- 11 percent to conduct investigations into fraud, waste, and abuse allegations.
- 14 percent for employee professional development, internal quality improvement projects, and other internal administrative functions.
- 13 percent for compensated absences such as annual, sick, and holiday leave.

AUDIT PLAN MAPPED TO ERM

As part of the ERM program, university leadership recently identified key residual risks across six thematic areas. The graphic below depicts how planned projects will provide audit coverage of enterprise risks.

OFFICE OF AUDIT, RISK, AND COMPLIANCE

PROPOSED AUDIT PLAN

Fiscal Year 2018-19

June 3, 2018

BRIAN DANIELS
DIRECTOR OF INTERNAL AUDIT
OFFICE OF AUDIT, RISK, AND COMPLIANCE

VIRGINIA TECH

Overview – Annual Audit Plan

The Office of Audit, Risk, and Compliance (OARC) conducts:

- Risk-Based Assurance Engagements
- Policy Compliance Reviews
- Management Advisory Services
- Investigations

Annual risk assessment process informs and guides the development of the audit plan for the next fiscal year

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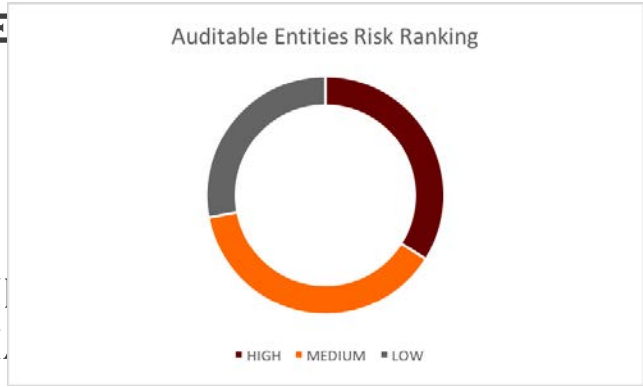
RISK ASSESSMENT PROCESS

Components of the annual risk assessment process included:

- **ERM**
  - Separate but related university initiative
  - Incorporates perspective of university leade
- **OARC Audit Planning Risk Assessment**
  - Approximately 175 auditable entities
  - Control Environment, Business Exposure, Pu
    Sensitivity, Compliance Requirements, Inform
    Technology & Management Reporting
- **IT Risk Assessment**
  - Variety of systems and technologies to include emerging topics
  - Mapped to ISO 27002 standard



OVERVIEW – ANNUAL AUDIT PLAN

OARC has identified certain critical areas for inclusion in the core audit plan to ensure that adequate coverage is provided over a reasonable time. The critical areas for core audit plan inclusion are:

• Academic Units	• Human Resources
• Auxiliary Enterprises and Athletics	• Information Technology
• Campus Safety and Security	• Off-Campus Locations
• Enrollment Services	• Research
• Facilities and Operations	• Student Services
• Financial Management	

RISK-BASED AUDIT PROJECTS

The audit plan focuses on strategic, operational, financial, compliance, and IT risks. The audit plan will be reconfigured as needed when new topics requiring more immediate attention arise.

Athletics *	Research: Grant Management *
Americans with Disabilities Act (ADA) Compliance	Research: Subrecipient Monitoring *
Human Resources: Benefits*	School of Public and International Affairs
Hume Center	Student Medical Insurance Reimbursement Program
IT: Controlled Unclassified Information (CUI) and Secure Research Environment (SRE)	Title IX Compliance
IT: Industrial Control Systems	University Building Official
IT: Third-Party Access to University Data	University Registrar
Maintenance Reserve	University Scholarships and Financial Aid*
Office of the University Bursar	** Entity receives an annual audit on different components of their operation*

POLICY COMPLIANCE AUDITS

OARC will continue its program of limited scope reviews of senior management areas. These surveys review major aspects of a department's administrative processes using internal control questionnaires and limited testing that provides broad audit coverage ensuring compliance with university policies on campus.

College of Agriculture and Life Sciences
Vice President and Dean for Graduate Education
Vice President for Student Affairs

MANAGEMENT ADVISORY SERVICES

The nature and scope of management advisory service activities, developed through agreement with the client, add value and improve the university's governance, risk management, and control processes without the internal auditor assuming management responsibility.

School of Plant and Environmental Sciences
Youth Protection Activities

Additional Audit Projects

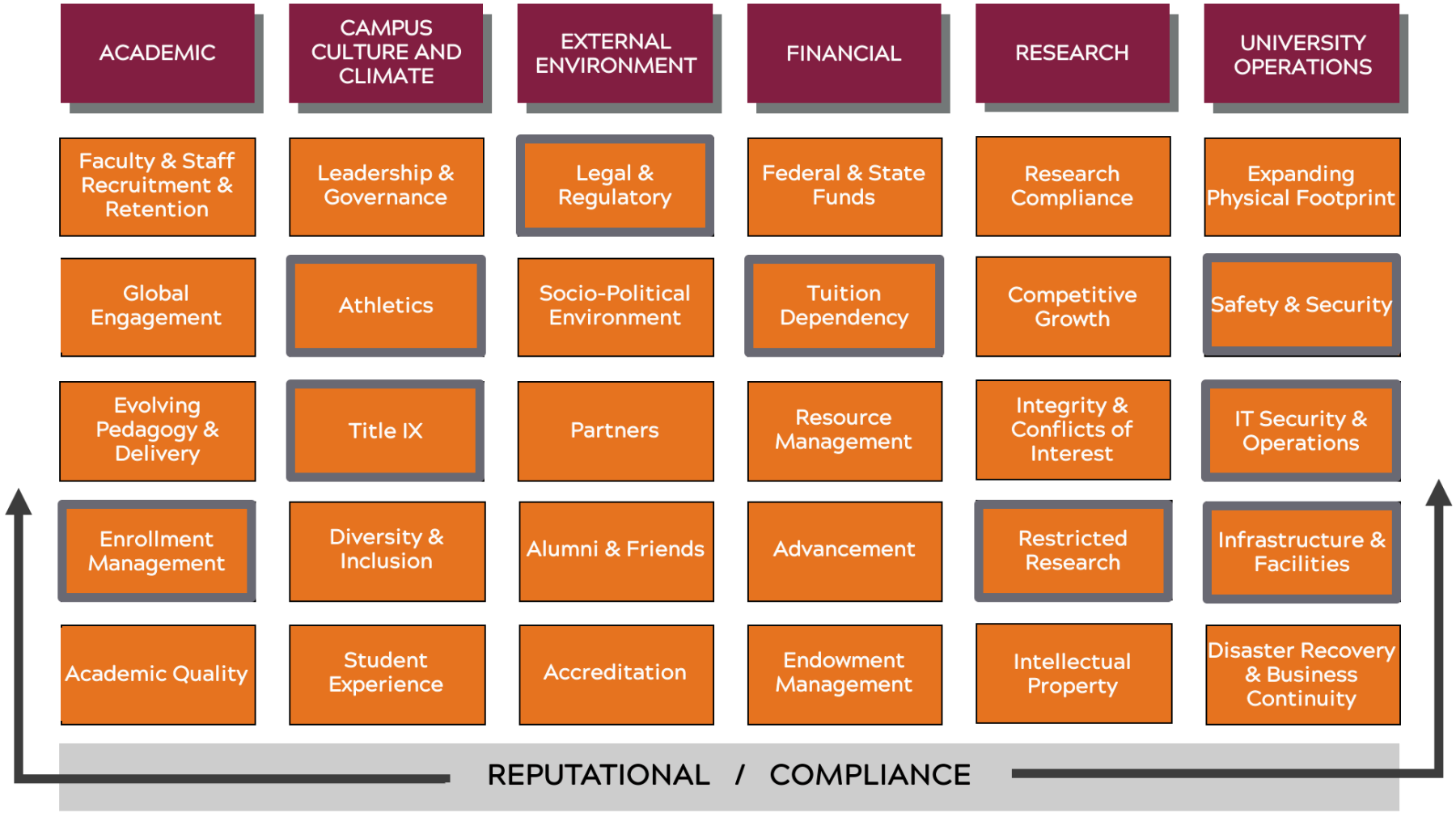
With additional resources, the following projects would have been included for the fiscal year 2018-19 audit plan. Otherwise, these projects will be considered for inclusion on the fiscal year 2019-20 plan.

College of Natural Resources and Environment (Compliance Review)	Graduate Education
Contract Approval and Delegated Authority	IT: Windows Server Security
Eastern Shore AREC	Licensing and Trademarks
General Data Protection Regulation (GDPR) (Advisory Review)	Parking and Transportation

AUDIT RESOURCES

- Audit Plan - professional staffing of 11 FTEs
  - 2 positions held vacant to cover other unfunded expenses
  - Relative seniority for audit staff prioritized when filling positions at the urging of the audit committee
- Student internship program – hire 2-3 Virginia Tech students
- OARC's available resources are allocated as follows:
  - 52% - completion of audit projects and follow-up
  - 10% - accommodate management requests
  - 11% - conduct investigations into fraud, waste, and abuse allegations
  - 14% - professional development, internal quality improvement, and administration

ENTERPRISE RISK LANDSCAPE



QUESTIONS?

ENTERPRISE RISK MANAGEMENT (ERM)

PROGRAM UPDATE

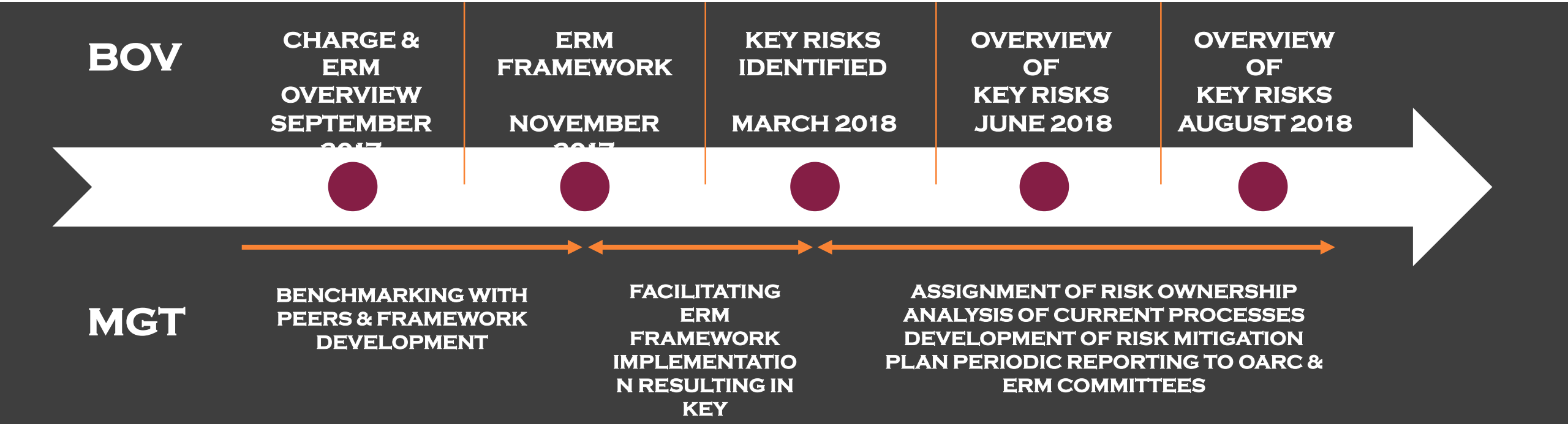
June 3, 2018

SHARON KUREK

EXECUTIVE DIRECTOR OF AUDIT, RISK, AND COMPLIANCE

VIRGINIA TECH

ERM TIMELINE



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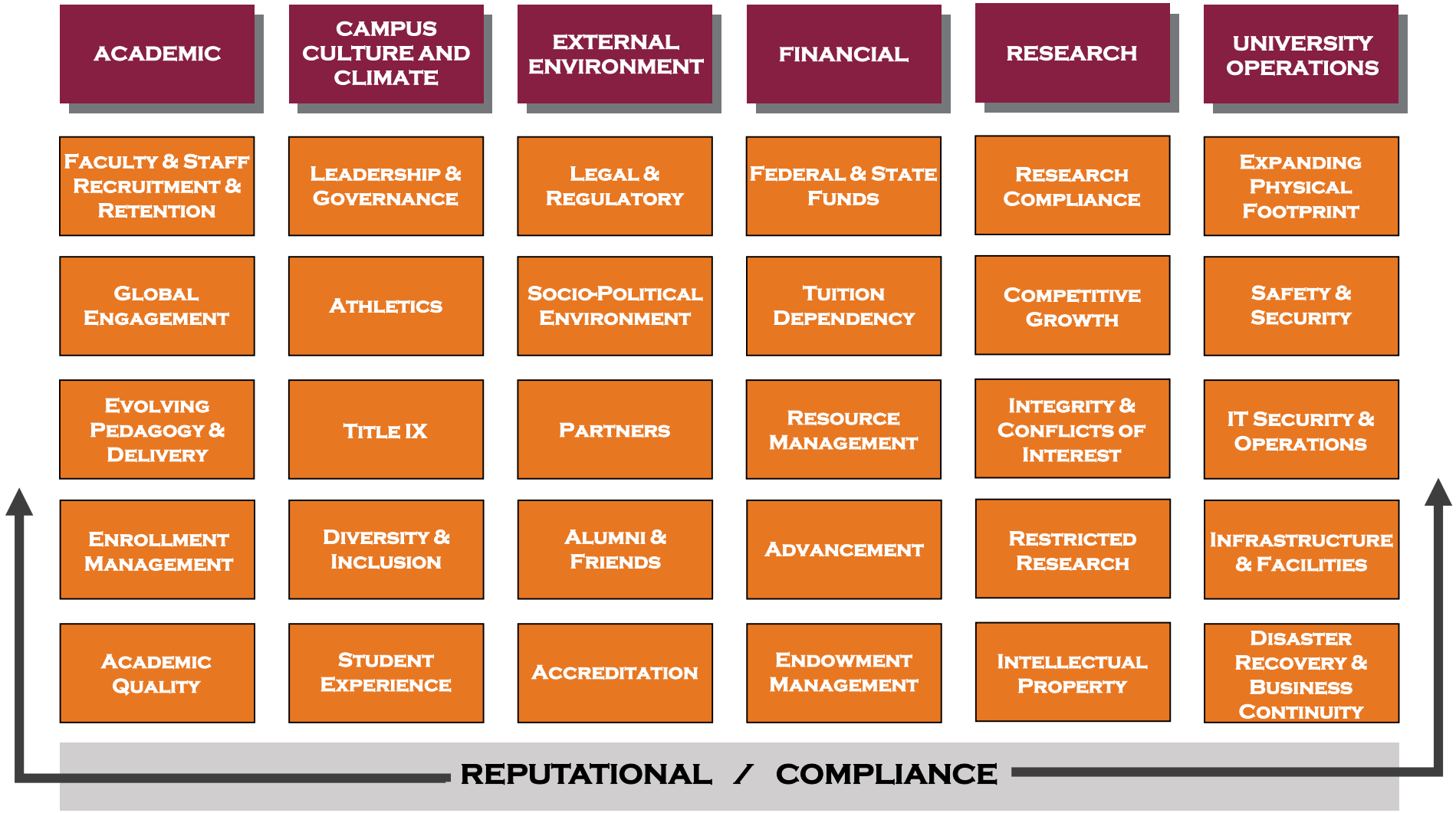
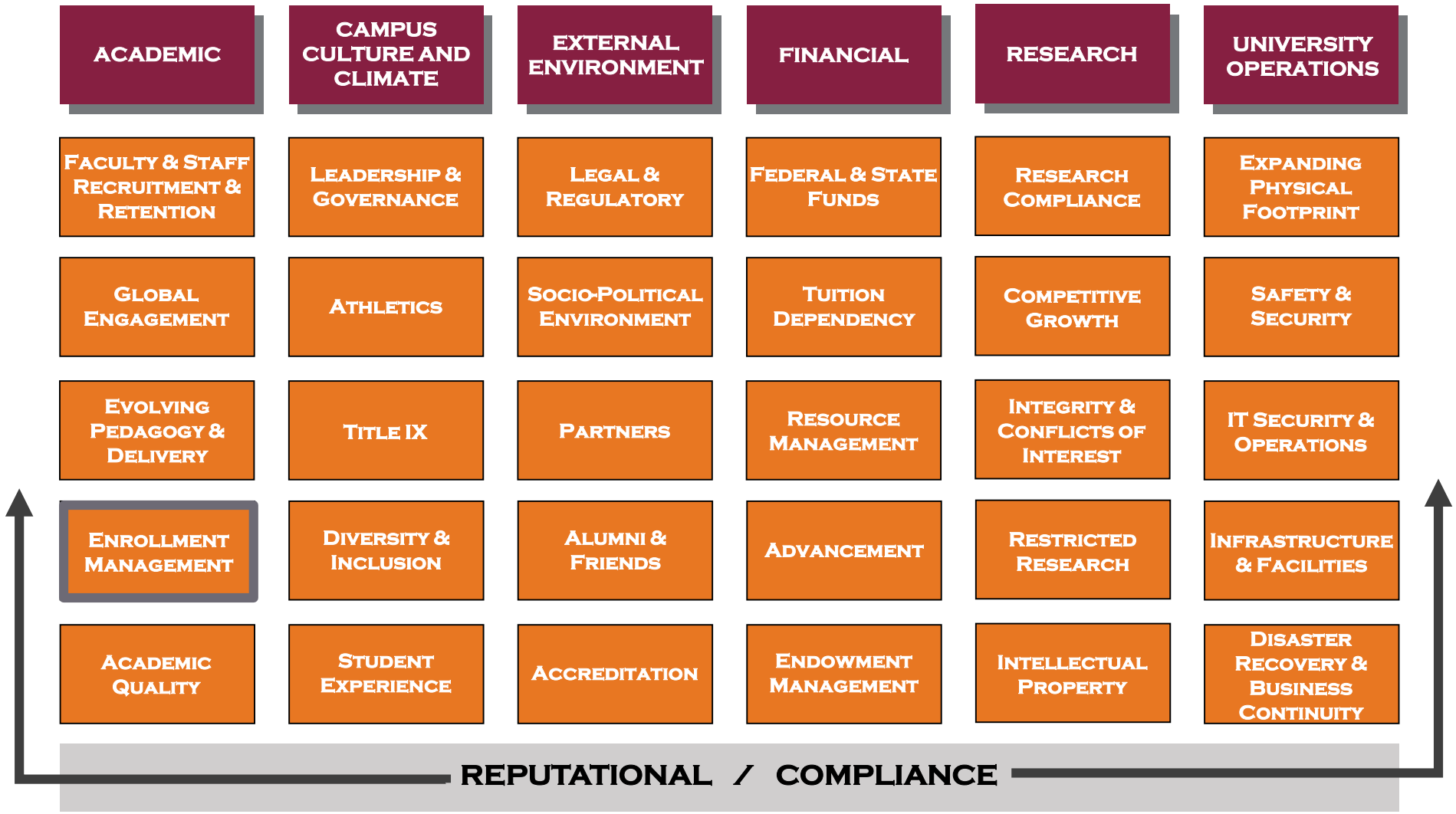
ENTERPRISE RISK LANDSCAPE



ERM TABLETOP EXERCISE

- OARC in conjunction with the Office of Emergency Management developed a scenario and facilitated the initial ERM Tabletop Exercise
- Strong representation of President's Leadership Team and other SMEs
- The scenarios involved evaluation of potential impacts if international student enrollment declined
- Scenarios of 10% and 50% drops were evaluated

ENTERPRISE RISK LANDSCAPE



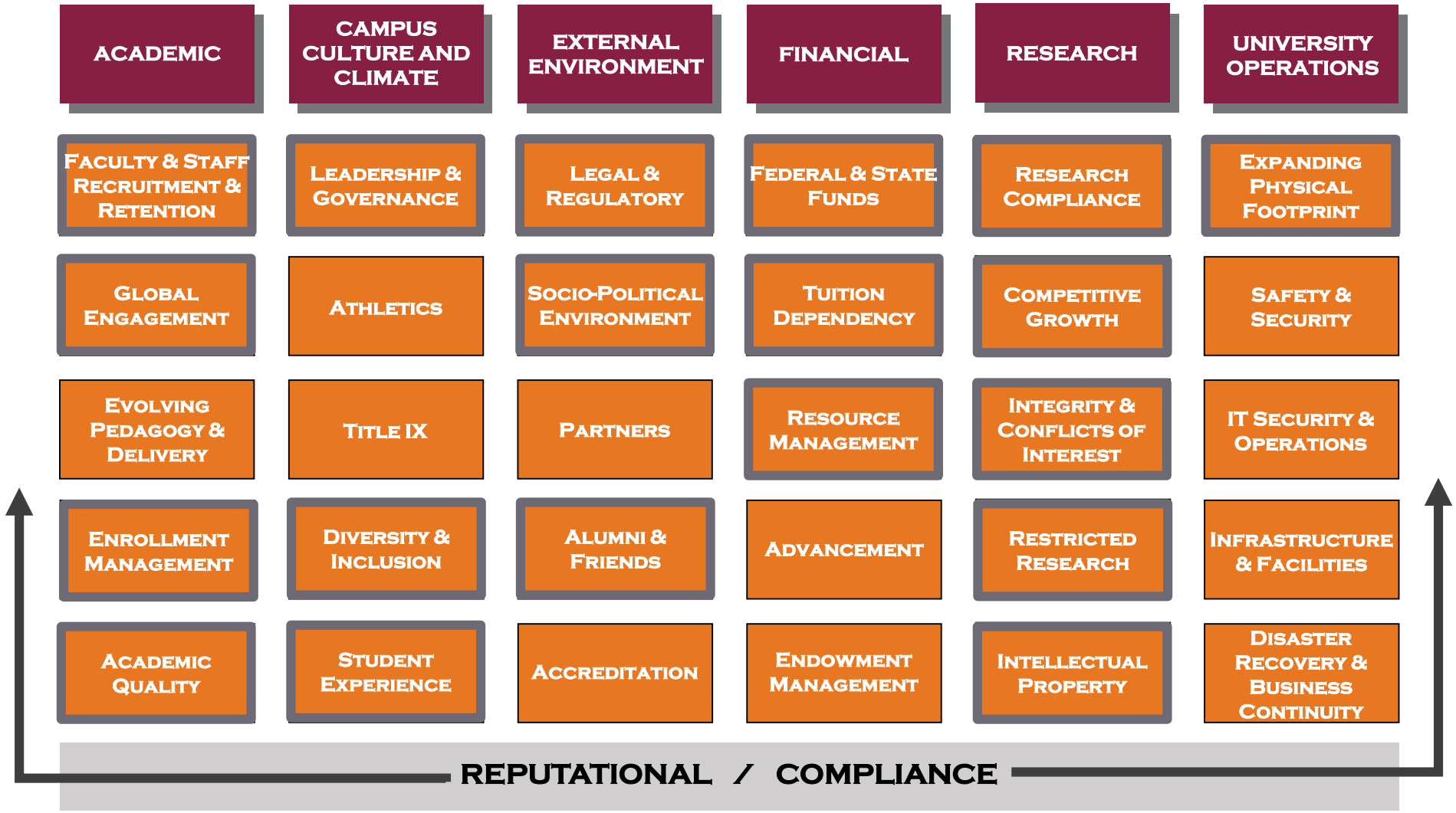
ERM TABLETOP EXERCISE – CONT.

- Impacts to various strategic efforts were noted, including:
  - Impact to student experience and Global Land Grant aspirations
  - Continuity of research
  - Diversity and inclusion initiatives
  - Housing vacancies
  - Local economy and community interactions
  - Recruiting and retention
  - Budgetary reliance on out-of-state student enrollment

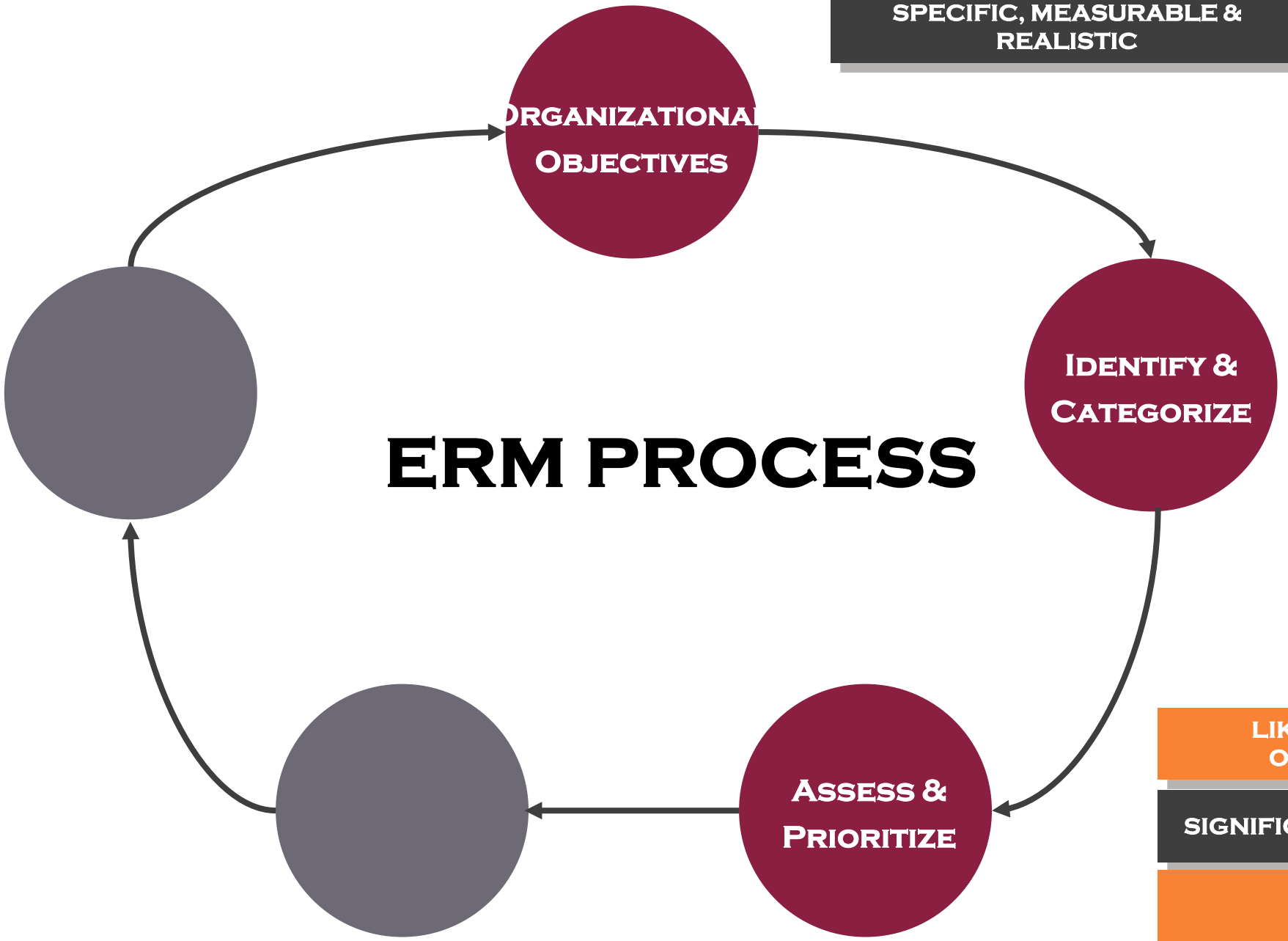
ERM TABLETOP EXERCISE – CONT.

- The exercise resulted in robust dialogue and emergence of takeaway objectives including:
  - In-depth financial analysis is needed to better understand monetary impact of enrollment trends
  - Exploration of diversifying international student recruitment efforts
  - Analysis of academic and research programs with high concentrations of international populations
  - Exploration of strategies for enhanced international brand awareness

ENTERPRISE RISK LANDSCAPE



ERM PROCESS



SPECIFIC, MEASURABLE & REALISTIC

- STRATEGIC
- FINANCIAL
- COMPLIANCE
- OPERATIONAL
- REPUTATION

- LIKELIHOOD OF OCCURENCE
- SIGNIFICANCE OF IMPACT
- VELOCITY

TIMELY

TRANSPARENT

ERM NEXT STEPS

RISK OWNERSHIP

BUSINESS PROCESSES

INTERNAL / EXTERNAL REVIEW & ANALYSIS

QUESTIONS?

INSTITUTIONAL COMPLIANCE PROGRAM (ICP) UPDATE

JUNE 3, 2018

Sharon Kurek

Executive Director of Audit, Risk, and Compliance

VIRGINIA TECH

8 ELEMENTS OF AN EFFECTIVE COMPLIANCE PROGRAM

- High-level personnel exercising oversight
- Written policies and procedures
- Training and Education
- Lines of Communication
- Well publicized disciplinary guidelines
- Internal compliance monitoring
- Response to detected offenses
- Perform periodic compliance risk assessments

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COMPLIANCE PROGRAM BENEFITS: A Coordinated Effort

- Foster a culture of ethics and compliance that is central to all of the institution's operations and activities
- Understand the nature of risks and potential exposures
- Identify and manage risks that impact the university's reputation
- Integrate the compliance program into ERM Framework
- Help individuals and units do their jobs more effectively

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INSTITUTIONAL COMPLIANCE PROGRAM (ICP)

- Leverage existing structures (including internal audit, enterprise risk management (ERM), hotline administration, legal counsel, and the policy office) to support compliance efforts
- Office of Audit, Risk, and Compliance to coordinate the ICP by being a resource and serving as a catalyst for the achievement of university best practices in compliance-related subject matter areas

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COMPLIANCE FRAMEWORK

STATISTICS

- CAC – 20 Members
- 56 Distributed Compliance Owners
- 298 Regulations Initially Identified by OARC

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ICP – Executive Compliance Committee (ECC)

- Promotes excellence in our compliance efforts to assure compliance with legal, regulatory, and ethical responsibilities
- Approves the university's compliance priorities and has oversight responsibility for the university's compliance efforts, including fulfillment of these priorities
- Serves as the primary point of contact for the administration on organizational compliance matters with the Compliance, Audit, and Risk Committee of the Board of Visitors

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ICP - Compliance Advisory Committee (CAC)

- The CAC will provide compliance leadership in the university's academic and administrative units and ensure effective communication and collaboration among those responsible for compliance by:
  - Fostering communication across campus on issues related to compliance
  - Maintaining a university compliance matrix
  - Reviewing the results of the compliance risk assessment and proposing university priorities
  - Ensuring the development and implementation of corrective action plans as developed by responsible parties and approved by senior management
  - Reporting results to the ECC, including progress on plans and risks being assumed

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ICP - OARC

- While the OARC does not own any discrete compliance subject matter area, it will assist in promoting a culture of compliance and ethical behavior by:
  - Developing a compliance matrix of applicable regulations and authoritative guidance with responsible parties
  - Implementing the compliance risk assessment process as a component of the ERM Program
  - Facilitating the university compliance and ethics hotline
  - Assisting the compliance committees in their various duties
  - Providing assistance in responding to external reviews and investigations

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Common Higher Education Compliance Areas

- Access/Disability Services
- Accreditation
- Athletics
- Conflicts of Interest
- Discrimination / Harassment
- Donors and Gifts
- Emergency Preparedness
- Environmental Health & Safety
- Export Control
- FERPA / Education Records
- Financial Aid
- Fiscal Management
- Global Operations
- HIPAA Privacy and Security
- Human / Animal Subjects
- Human Resources / Equal Opportunity
- Immigration
- Intellectual Property /Technology Licensing
- Research Administration
- Safety / Security
- Scientific Misconduct
- Tax Compliance

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QUESTIONS?

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VIRGINIA TECH™

Committee Minutes

FINANCE AND RESOURCE MANAGEMENT COMMITTEE
110B, 130A and B, Classroom Building
June 4, 2018

Closed Session

Board Members Present: Greta Harris, Anna James, Dennis Treacy, Horacio Valeiras

VPI & SU Staff: Kay Heidbreder, Tim Sands, Savita Sharma, Dwight Shelton

1. **Motion for Closed Session:** Motion to begin closed session.

* 2. **Ratification of Personnel Changes Report:** The Committee met in closed session to review and take action on the quarterly Personnel Changes Report.

The Committee recommended the Personnel Changes Report to the full Board for approval.

* 3. **2018-19 Promotion, Tenure, and Continued Appointment Program:** The Committee met in closed session to review and take action on the 2018-19 Promotion, Tenure, and Continued Appointment Program.

The Committee recommended the 2018-19 Promotion, Tenure, and Continued Appointment Program to the Full Board for approval.

Open Session

Board Members Present: Greta Harris, Anna James, Hans Robinson – faculty representative, Dennis Treacy, Horacio Valeiras

VPI & SU Staff: Bob Broyden, Mark Cartwright, David Crotts, John Cusimano, John Dooley, Michael Friedlander, Mary Helmick, Jim Hillman, Tim Hodge, Elizabeth Hooper, Robin Jones, Theresa Mayer, Erin McCann, Steven McKnight, Nancy Meacham, Scott Midkiff, Ken Miller, Kim O'Rourke, Mark Owczarski, Charlie Phlegar, Scot Ransbottom, Lisa Royal, Tim Sands, Savita Sharma, Dwight Shelton, Ken Smith, Brad Sumpter, Tracy Vosburgh

1. **Motion to Reconvene in Open Session:** Motion to begin open session.

2. **Opening Remarks**

3. **Consent Agenda:** The Committee considered for approval and acceptance the items listed on the Consent Agenda.

   a. Approval of Items Discussed in Closed Session.

   b. Approval of Minutes of the March 25, 2018 Meeting.

* c. Approval of 2018-19 Pratt Fund Budgets: The Pratt Fund provides funding for programs in both the College of Engineering and Department of Animal Nutrition in the College of Agriculture and Life Sciences. For 2018-19, the College of Engineering proposes expenditures of $999,333 and the Department of Animal Nutrition proposes expenditures of $969,833.

* d. Approval of 2018-19 Hotel Roanoke Conference Center Commission Budget: The Hotel Roanoke Conference Center Commission was established by resolutions adopted by Virginia Tech and the City of Roanoke, under Commonwealth of Virginia enabling legislation. The enabling legislation provided that the Commission shall annually prepare and submit to both the City of Roanoke and Virginia Tech a proposed operating budget showing its estimated revenues and expenses for the forthcoming fiscal year, and, if the estimated expenses exceed the estimated revenues, the portion of the unfunded balance is to be borne by each participating party for the operation of the conference center. The funds for Virginia Tech total $80,000 for the fiscal year 2018-19 and will come from the Fralin endowment which was established to assist with the project.

* e. Approval of 2018-19 Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences Budget: The collaboration agreement, which outlines the relationship and responsibilities of Virginia Tech and Wake Forest University School of Biomedical Sciences, requires the governing boards of each university to approve the annual operating budget for the School of Biomedical Engineering and Sciences. The Virginia Tech financial commitment for fiscal year 2018-19 is $5.75 million.

* f. Approval of Resolution to Reappoint University Commissioner to the Hotel Roanoke Conference Center Commission: The resolution seeks approval to reappoint the Vice President for Outreach and International Affairs as a representative of the university on the Hotel Roanoke Conference Center Commission.

The Committee approved the items on the Consent Agenda and recommended the 2018-19 Pratt Fund Budgets, the 2018-19 Hotel Roanoke Conference Center Commission Budget, the 2018-19 Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences Budget, and the resolution to reappoint University Commissioner to the Hotel Roanoke Conference Center Commission to the full Board for approval.

4. **Report on Procurement Opportunities:** The Committee received a comprehensive report on the procurement initiatives implemented by the university to achieve cost savings, operational efficiencies, and value-added procurement. The report also provided information on the Small, Women-owned, and Minority business initiative, future procurement opportunities under consideration, and related challenges. The report showed that the university achieved $2.9 million in cost savings through participation in the Virginia Higher Education Procurement Consortium and $10.6 million in trackable savings from internal procurement negotiations.

5. **Discussion on Resource Development:** The Committee received a presentation describing various alternate tuition models utilized by other universities in Virginia and displaying the impact of these models on tuition rates over time. The Committee requested for a further discussion on prioritization of university initiatives and needs to meet the university's long-term goals

***** 6. **Report on and Recommendation Regarding Quasi-Endowments:** The Committee received a report on and reviewed for approval a recommendation regarding quasi-endowments. Quasi-endowments represent university funds designated by the Board of Visitors rather than by a donor. They carry the intent to provide ongoing income from a long-term investment; however, the governing board retains the authority to repurpose such funds and to remove funds from the quasi-endowment asset category at any time. The university's Chief Financial Officer plans for the deployment of the quasi-endowment payouts in the university's budget process to achieve the intended objectives of each quasi-endowment.

The university has completed a comprehensive review of its long-term investments and strategic plans. As a result of this review, the university proposes that certain investments totaling $69.5 million be designated and/or reaffirmed by the Board of Visitors as quasi-endowments.

The Committee recommended that the listed investments be reaffirmed and/or designated as quasi-endowments.

* 7. **Resolution on University Lines of Credit:** The Committee reviewed for approval a resolution on university lines of credit. Consistent with the trend at many major research institutions, the university has developed, and is in the process of implementing, an updated cash management strategy to leverage limited financial resources. This is accomplished through the investing of additional university operating reserves in the Virginia Tech Foundation's (Foundation) endowment program. While this should result in achieving enhanced investment returns over time, it will also result in maintaining a reduced amount of operating reserves.

A university workgroup comprised of personnel from the Budget Office, Controller's Office, and Investment and Debt Management identified the appropriate level of cash reserves to invest and concluded that a back-up operating line of credit would be needed to completely implement the new investment strategy. The workgroup examined the current and projected cash flows and determined that $185 million of external liquidity would be needed, based on the university's FY 2018 annual budget. The plan results in the generation of enhanced investment income that will help advance university strategic needs while reducing the need for tuition and fee increases.

This resolution seeks approval to establish and access the lines of credit up to an aggregate amount of $200 million and the corresponding credit agreement, and promissory note. The resolution will provide authorization to the university to draw upon the lines of credit as needed.

The Committee recommended the Resolution on University Lines of Credit to the full Board for approval.

* 8. **Approval of 2018-19 Faculty Compensation Plan:** The Committee reviewed for approval the 2018-19 Faculty Compensation Plan. The report defines the qualification criteria for teaching and research faculty and administrative and professional faculty, provides guidance on the authorized salary average for full-time teaching and research faculty positions, and requires board approval. The key elements of the 2018-19 plan are consistent with the current plan.

For Fall 2016, Virginia Tech's Actual Salary Average was $100,552. This placed Virginia Tech at the 35th percentile of its peer group, based on the most recent peer salary data available from the Integrated Postsecondary Education Data System (IPEDS). Based on SCHEV's forecast of salary escalation at peer institutions, the university estimates that the Actual Salary Average will rank in the 33rd percentile of peer institutions for Fall 2017.

Recognizing the critical nature of faculty compensation, the university's standing relative to the 60th percentile of the university's peer group average salary, the higher levels of competing offers being received by key faculty, and to minimize the high cost of turnover, the university proposes continuing the traditional annual merit-based faculty salary increase program in 2018-19. This plan authorizes management to plan and budget for the resource allocations necessary to support a merit-based faculty salary increase averaging two percent for faculty for 2018-19. The university may also elect to create a supplemental pool to achieve certain targeted salary compensation or retention needs, such as national distinction.

The Committee recommended the 2018-19 Faculty Compensation plan to the full Board for approval.

9. **Update on the Special Session of the General Assembly:** The Board received an update on the special session of the General Assembly at the information session on Sunday which included the highlights of the final 2018 General Assembly compromise budget. The Committee had the opportunity for follow up discussion.

* 10. **Approval of 2018-19 University Budgets:** The Committee reviewed for approval the 2018-19 University Budgets. The University Budgets are comprised of the Operating and Capital Budgets.

a. Update on University Tuition and Fees: The 2018 General Assembly adjourned on March 9, 2018 without agreement on a final 2018-20 biennial budget The Committee received an update on the Tuition and Fee activities in the state and discussed the Virginia Tech Tuition and Fee rates relative to its budgets.

b. Auxiliary System Budgets: The auxiliary systems are a component of the overall operating budget. In accordance with the resolutions authorizing and securing the Dormitory and Dining Hall System, Electric Service Utility System, University Services System, and Athletics Facilities System revenue bonds, the Board of Visitors is required to separately adopt an annual budget for each system. All budgets are balanced and designed in accordance with bond covenants including maintenance and reserve requirements. Once approved by the Board of Visitors, the annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the auxiliary systems. The 2018-19 budget for auxiliary systems, including debt service for the period July 1, 2018 to June 30, 2019 are:

i. Dormitory and Dining Hall System Budget - $127.1 million

ii. Electric Service System Budget - $36.9 million

iii. University Services System Budget - $51.6 million

iv. Athletics Facilities System Budget - $74.5 million

The Committee recommended each of the four Auxiliary Systems Budgets for 2018-19 to the full Board for approval.

c. Operating Budget and Capital Budget: The university anticipates an initial state authorization of $1.5 billion during 2018-19 to carry out all of its programs, based on the forecast of direct appropriations to the university. However, the annual internal budget varies from this external expenditure authorization for several reasons, some of which increase the annual expenditure authority while others reduce the expenditure plans. For 2018-19, the recommended internal budget for all operations is $1.6 billion. This is an increase of $34.5 million, approximately 2.3 percent, over the adjusted 2017-18 budget. For 2018-19, the university's total General Fund allocation is estimated to be approximately $265.4 million, an increase of $3.3 million from the 2017-18 adjusted budget. The overall change includes an increase of $45.7 million attributable to the Educational and General program and $10.2 million of projected growth in auxiliary enterprises. General Fund revenues will provide $241.4 million in support for the instructional, research, and extension programs, $21.7 million for student financial assistance, and $2.3 million for the Unique Military Activities program.

The university's Educational and General budget will be $849.2 million in 2018-19. The total 2018-19 auxiliary revenue budget is $351.5 million, a growth of $10.2 million or 3.0 percent over the adjusted 2017-18 budget. The projected annual budget for Financial Assistance for Educational and General Programs is $322.1 million, a decrease of $22.8 million or 6.6 percent less than the adjusted 2017-18 budget. The most significant activity in this category is externally sponsored research.

The capital outlay program for 2018-19 is comprised of 11 Educational and General projects and 11 Auxiliary Enterprise projects for a total of 22 projects. The total capital outlay budget for fiscal year 2018-19 includes total project authorization of approximately $593 million; the annual expenditure budget for those projects is approximately $125 million.

The Committee recommended the 2018-19 University Budget to the full Board for approval.

11. **Approval of Year-to-Date Financial Performance Report (July 1, 2017 – March 31, 2018):** The Committee reviewed for approval the Year-to-Date Financial Performance Report for July 1, 2017 – March 31, 2018. For the third quarter, all

programs of the university are on target and routine budget adjustments were made to reflect changes in General Fund revenues and expenditure budgets in academic and administrative areas. The tuition and fee budget increased by $3.5 million in the third quarter for stronger than projected spring retention and winter session revenues.

For year-to-date ending March 31, 2018, $28.4 million has been expended for Educational and General capital projects, and $50.2 million has been expended for Auxiliary Enterprises capital projects. Capital outlay expenditures for year-to-date ending March 31, 2018 totaled $78.5 million.

The Committee recommended the Year-to-Date Financial Performance Report to the full board for Approval.

12. **Other Business:** The Committee discussed other topics as needed and explored topics for future committee meeting agendas. The Committee recognized Mr. Shelton and his team for presenting the materials in a comprehensive and understandable format.

Joint Open Session with the Buildings and Grounds Committee

Board Members Present: Greta Harris, C. T. Hill, Anna James, Robert Mills, Mike Quillen, Robert Sebek – staff representative, Dennis Treacy, Horacio Valeiras, Jeff Veatch

VPI & SU Staff: Mac Babb, Bob Broyden, Van Coble, John Cusimano, John Dooley, Ted Faulkner, Lance Franklin, Mary Helmick, Jim Hillman, Tim Hodge, Robin Jones, Chris Kiwus, Nancy Meacham, Ken Miller, Grant Morris, Mike Mulhare, Mark Owczarski, Charlie Phlegar, Scot Ransbottom, Lisa Royal, Savita Sharma, Dwight Shelton, Kayla Smith, Ken Smith, Jason Soileau, Brad Sumpter, Tracy Vosburgh, Sherwood Wilson

* 1. **Approval of Resolution for Planning the Slusher Residence Hall Replacement:** The Committees reviewed for approval a resolution for planning the capital project for Slusher Residence Hall Replacement.

Slusher Residence Hall was built in 1972 and is approximately 125,860 gross square feet with housing capacity for about 630 students. The facility has received few improvements since its original construction, does not meet student expectations, carries a significant deferred maintenance backlog, and requires frequent repairs that interrupt services.

The university has determined, because of Slusher Hall's condition, that the facility should be replaced rather than renovated. The university will first build and occupy a

new residential facility neighboring the existing Slusher Hall, then demolish and remove Slusher Hall, and, then build a second building on the site. The total bed count of the new facilities will equal or exceed the existing 630 beds with the intention to maximize the number of beds to the extent practical. This request is for a $3.5 million planning authorization to complete preliminary design documents for the Slusher Hall Replacement project.

The Committees recommended the Resolution for Planning the Slusher Residence Hall Replacement to the full Board for approval.

***** 2. **Approval of Resolution for Dietrick First Floor and Plaza Renovation Supplement:** The Committees reviewed for approval a resolution for Dietrick First Floor and Plaza Renovation Supplement.

The Board of Visitors approved the Dietrick First Floor and Plaza renovation project with a $7 million total project cost at its September 11, 2017 meeting. The scope and budget for the project resolution were based on a feasibility study from a consultant and internal reviews. Planning work is underway, and schematic design cost reviews reveal the actual total project costs exceed $7 million for the authorized scope.

The university has reviewed and analyzed each construction cost component of the project at the conclusion of schematic design and determined the total construction costs are $6.8 million. The soft costs for design, project management, inspections, equipment, furnishings, etc. are $1.5 million. Thus, the total project costs inclusive of design, construction, and equipment are $8.3 million. The university has reviewed and analyzed opportunities for cost controls and determined a major scope reduction, either elimination of the plaza improvements or elimination of the enclosure for the seat expansion, would be necessary to remain within the current $7 million project budget. The full project scope is necessary to meet the needs of the dining program and student expectations. The university has developed a financing plan to support the additional $1.3 million of costs necessary to complete the entire scope of work. This request is for a $1.3 million supplement to adjust the total authorization for the Dietrick First Floor and Plaza Renovation project to $8.3 million.

The Committees recommended the Resolution for Dietrick First Floor and Plaza Renovation Supplement to the full Board for approval.

There being no further business, the meeting adjourned at 11:32 a.m.

*** Requires full Board approval.**

Procurement Opportunities

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

May 11, 2018

Background

The mission of the university's procurement department is to provide efficient and responsive procurement, and to purchase high quality goods and services at reasonable costs in support of university's instructional, research, and public service programs. The department aims to conduct these activities in an effective manner that results in cost savings, value added opportunities, and/or operational efficiencies.

The procurement department oversees and performs all procurement activity of the university except for three delegated areas: (1) direct purchasing authority by departments for goods/services costing less than $2,000 (2) decentralized Information Technology hardware and software acquisitions handled directly by Information Technology and (3) decentralized capital construction procurement handled by Virginia Tech Facilities.

Procurement manages the university's e-procurement system (branded HokieMart); a procure-to-pay web hosted platform by Jaggaer (formerly SciQuest). Procurement is also responsible for administering the university's purchasing card (pcard) program which includes over 700 distributed pcards.

For fiscal year 2017, the procurement department managed the procurements of goods and services of $702 million. Procurement of $687 million was processed electronically through HokieMart (e-Procurement). Of the $687 million, $512 million was processed directly by departments utilizing self-service feature within Hokiemart and $175 million was awarded through competitive negotiations by the buyers within in the central procurement office. The remaining $14.5 million was processed on university issued pcards.

HokieMart

The Hokiemart is a single marketplace serving the decentralized campus where electronic orders can be formulated and issued to external vendors as well as internal suppliers. Implemented in 2008, this system provides single-source data entry, on-line approvals and workflow, and electronic delivery of completed orders to suppliers. For high volume vendors, the processes are fully automated from electronic requisition to electronic payment. The system also provides a platform for better utilization of centrally negotiated contracts resulting in cost savings delivered to the departments.

The university expanded the Jaggaer platform to also manage internal (department to department) business transactions on campus in addition to external transactions with outside vendors. Examples of internal business transactions that use HokieMart include facilities management, printing services, travel authorizations, and travel expense reimbursements. The internal electronic procurement system has eliminated approximately 24,500 paper-based transactions per year.

Procurement Operations

Virginia Tech Procurement operations enable the sourcing and acquisition of goods and services to support university operations and further university growth. While utilizing best practices in the acquisition of goods and services to serve the university community, the Procurement department has cost savings as the primary goal. The department employs multiple procurement strategies, ranging from strategic partnerships to traditional Request for Proposal or Invitation for Bid publicly-posted solicitations based on unique situations.

Virginia Higher Education Procurement Consortium (VHEPC)

In 2012 - 2013, Virginia Tech and the University of Virginia partnered with the Secretary of Education to explore the benefits of both regional and state-wide purchasing collaborations. Based upon regional collaborations in other regions of the country and supported by the Lumina Foundation, this work eventually resulted in the creation of the Virginia Higher Education Procurement Collaborative (VHEPC). The VHEPC was organized and financially supported by 13 Virginia higher education institutions in 2015 without any state financial support. By utilizing the collective buying power of these institutions, the VHEPC is positioned for procurement best practices by identifying strategic sourcing opportunities, leveraging vendors, and negotiating strategic contracts to maximize savings and cost containment for all participating institutions.

Virginia Tech Procurement is a major contributor to the Virginia Higher Education Procurement Consortium (VHEPC) with the university's Procurement director serving as the chairperson of the consortium's functional steering committee. The consortium has been successful in negotiating substantial cost savings for public higher education institutions in the Commonwealth.

As of March 2018, cost savings from VHEPC procurement activities reached $2.9 million for Virginia Tech and a total of $13.9 million for the 13 member institutions. Virginia Tech has made a financial commitment to the collaboration of $120,866 since 2015 and has realized a 121 percent annualized return on investment over the last four years. Overall, Virginia Tech has experienced cost savings of 21 percent by utilizing VHEPC negotiated contracts compared to spend on previous institutionally issued contracts or "piggybacking" off cooperative contracts from another institution or national group purchasing organizations.

Please see *Attachment A* for additional information on VHEPC and specific examples of cost savings resulting from the VHEPC collaborative contracts.

Virginia Association of State College and University Purchasing Professionals (VASCUPP)

The Virginia Association of State College and University Purchasing Professionals (VASCUPP) was established in 1992 with the objective of identifying opportunities for cooperative procurements and cost savings for higher education institutions in Virginia. The member institutions of VASCUPP share contracts through cooperative contracting language in each contract. Cooperative procurements through VASCUPP provide access to a larger number of contracts which reduces the need for duplicate procurements between institutions, offers greater savings through leveraged spend, and reduces administrative effort. As opposed to VHEPC, VASCUPP cooperative contracting is negotiated and managed by a lead institution with the resulting awards being made available to other schools to piggy-back or "ride" a cooperative contract.

VASCUPP member institutions have all received delegated purchasing authority from the state's central purchasing agency and include: Virginia Tech, University of Virginia, George Mason University, James Madison University, Virginia Military Institute, Radford University, University of Mary Washington, Virginia Commonwealth University, Old Dominion University, Longwood and College of William and Mary.

Procurements Managed By Virginia Tech Procurement

In addition to the strategic partnerships stated above, the Virginia Tech Procurement department negotiates and manages a large number of contracts to support university operations. These procurement activities are public and transparent as required of all public agencies, including the higher education institutions in the Commonwealth of Virginia. Utilization of publicly advertised Request for Proposal and Invitation for Bid solicitations results in negotiations of contracts or direct awards resulting in the highest level of costs savings.

Internally, Virginia Tech Procurement has 475 negotiated term contracts in place for the purchase of recurring material and service commodities. Trackable cost savings from the negotiations of these contracts total $10.6 million.

Recently awarded procurements resulting in cost savings to the university include a gasoline and diesel fuel contract, athletic travel management services, and short term and long term disability insurance (Employee Benefit). For more details on the cost savings achieved through these recent procurement awards, see *Attachment B*.

Value-Added/Operational Efficiency Procurements

While cost savings or cost avoidance is a primary focus of procurement activities, the procurement department also supports acquisition of goods and services that add value or enhance efficiency to the operations of the university. These projects typically arise as a result of strategic changes implemented at the university, new programs brought on board, or enhancements to university operations. Many of these types of contracts result in revenue generating opportunities.

The recent deployment of an Amazon Business e-Catalog within HokieMart is an illustration of such value-added procurement. Through a new partnership between Virginia Tech and Amazon Business, the university is now one of the first large research higher education institutions in the country to implement an e-catalog powered by Amazon Business within its own e-procurement system. The Amazon e-catalog provides a platform for the university to transition over $1.4 million of spend previously purchased individually by departments on Amazon.com through university purchasing cards to the e-procurement system, HokieMart. This transition brings the multiple, disparate Amazon accounts under one university account, thereby enhancing the internal controls over large volume of purchases. It enables greater oversight through standard approvals before the purchase is made and better reporting on the items the university buys from Amazon. The greatest benefit gained with this project is a reduction in potential fraud exposure by eliminating high volume, low spend pcard purchases at point of purchase.

Additional examples of efficiencies and value-added procurements include Intelligent Postal Lockers, Study Abroad Insurance, Turnkey Tailgating Services, and VT Magazine Print and Digital Ad Sales.

For more details on efficiencies and added value achieved through these procurement awards, see *Attachment C*.

Small, Women-owned, and Minority-owned Businesses (SWaM) Initiative

The Procurement department leads the supplier diversity initiative known as the SWaM initiative. As a vigorous initiative to find opportunities for small, woman-owned and minority-owned vendors, Procurement department engages with SWaM companies within Virginia Tech's local economy, specifically, to locate and foster opportunities for these companies to do business with the university.

Over the last 18 months, Procurement has initiated a re-brand of its SWaM initiative to energize campus-wide efforts in support of a diverse supplier opportunity program. Emphasizing the identification and communication of opportunities for small, woman-owned and minority-owned vendors, the university's SWaM initiative has been renamed the Virginia Tech Supplier Opportunity Program. The program is led by Mark Cartwright, Assistant

Director of Supplier Diversity, who returned to the university following service to Governor McDonnell as Special Assistant to the Governor for Supplier Diversity.

The pillars of the university's supplier opportunity program are awareness, inclusion, and development with emphasis on increasing awareness within the university regarding the SWaM vendors, improving vendor relationships, enhancing language in Request for Proposals (RFPs) to make them more inclusive for SWaM vendors, and development of programs to further support SWaM efforts such as mentor/protégé programs and educational tools.

By direction of Governor Executive Orders and SCHEV management standards relating to SWaM utilization, the university establishes annual goals for its SWaM initiatives that align with the Commonwealth's goals. Achievement of these goals are reported bi-annually as part of the university's overall management standards scorecard. Virginia Tech has met all management standards relating to SWaM utilization since they were implemented.

Utilization of Small, Woman-owned and Minority-owned Businesses

FY15 – FY18 Total SWaM Spend (Dollars In Millions)

Fiscal Year	Small Business	Woman-Owned Business	Minority Owned Business	Total SWaM Spend	Total Discretional Spend**	Percentage of SWaM Spend to Discretional Spend**
2015	$50	$14	$7	$70	$243	29.2%
2016	$57	$ 9	$8	$74	$265	27.7%
2017	$57	$ 4	$ 4	$65	$249	26.0%
2018*	$47	$ 5	$ 5	$57	$202	28.3%

*thru 3rd quarter

**totals and percentages shown reflect rounding of dollars

Current Initiatives and Future Opportunities

Virginia Tech Procurement has engaged in a continuous improvement and best practices review utilizing the expertise in procurement through consulting services provided by Stonebridge Ventures, Inc. Since the first engagement with Stonebridge in 2016, a study of university spend targeted commodities that offered the greatest opportunity for standardization. These efforts have led to implementation of the following initiatives:

- Establishment of an inbound freight program with FedEx as the standardized carrier for inbound shipments of goods to campus. This program has resulted in over $130,000 in freight cost savings in the first 18 months.

- Additional standardization programs are underway including standardizing vendors that provide promotional products and catering services. These programs should be completed within the next year. Promotional items are defined as those items typically used to market the university and include the brand recognition of Virginia Tech's marks and logos. Reducing the number of vendors providing promotional items further protects the brand of the university and allows for greater oversight of adherence to university brand requirements. Additionally, large volume purchases to a smaller number of promotional companies should lower pricing as well. Likewise, standardizing catering services will give greater oversight on the safety of catered products and services as well as cost savings.

- Two additional initiatives identified by Stonebridge which offer opportunities for improved efficiencies include:

    - Increasing the threshold for departmental direct purchase delegation to reduce the volume of small dollar requisitions processed through central procurement. Currently the department delegated amounts are purchases under $2,000. Raising the threshold for delegation of purchases to departments will allow the procurement staff to concentrate on more strategic purchasing activities.

    - Conducting an optimization review of the current HokieMart implementation to determine additional functionality or changes in the procure to pay technology that would offer Virginia Tech even more efficiencies. This review with Jaggaer is scheduled for fall of 2018.

  These initiatives are currently under consideration for implementation.

Challenges

As a decentralized and restructured higher education institution within the Commonwealth of Virginia, Virginia Tech has embraced the ability to implement procurement processes and procedures for the benefit of the university. However, each year the university must actively respond to legislation that serves to revert the delegated authority and decrease the autonomy previously granted. This is not targeted specifically towards Virginia Tech; however, it is a challenge to the decentralized procurement environment in higher education at the state level.

As new initiatives are introduced that offer opportunities for overall cost savings or efficiencies, the university has to adapt to a new culture of strategic and standardized procurement. The standardization of vendors competes with the opportunity for open selection or free choice of vendors in certain commodities and support for the SWaM initiative and results in resistance to change. This is an inherent challenge of a growing higher education institution.

VIRGINIA HIGHER EDUCATION PROCUREMENT COLLABORATIVE (VHEPC)

In 2015, 13 Virginia higher education institutions, including Virginia Tech, formalized a commitment to create a statewide purchasing collaborative for the establishment of negotiated contracts mutually benefitting all Commonwealth of Virginia (COVA) public higher education institutions. This collaborative concept was born from an idea originally proposed to COVA legislators by the Vice President for Finance and CFO at Virginia Tech and the Senior Vice President for Operations at the University of Virginia, to expand collaborative procurement activities for commonly procured goods and services needed by higher education institutions in the Commonwealth of Virginia. This procurement consortium would be successful in negotiating larger cost savings for public and even potentially private educational institutions in the Commonwealth, leveraging the total spend of all institutions versus each university's individual negotiating power. The concept garnered support of several legislators and the Secretary of Education, however, the state's legislative process would ultimately not approve to fund the consortium.

Current Status

The 13 higher education institutions came together to establish the collaborative for the mutual benefit of the institutions. The core mission of the consortium was to transition from traditional cooperative procurement methods to a true collaborative approach utilizing the total spending power of the 13 public institutions combined to negotiate the best opportunities for savings, discounts and incentives. With the added resource of an exclusive general manager and one data analyst hired to represent the collaborative, the VHEPC initiated their work in early 2015 first by analyzing overlapping existing vendor contracts of its member institutions. With a focus on re-negotiating existing agreements into a single master agreement recognizing the commitment of the 13 institutions and their collective spend, immediate results were achieved. True savings and a return on investment began to be realized by the end of fiscal year 2016. In fiscal year 2017, the consortium was ready for its first issued Request for Proposal (RFP) advertised as a VHEPC collaborative contracting opportunity by all 13 higher education institutions. Virginia Tech served as the lead procurement institution for the solicitation of a strategic contract for laboratory and research supplies. The procurement process succeeded resulting in an award and contract with Fisher Scientific. All member institutions are now utilizing this contract as well as several other higher education institutions and government entities across the country.

As of March 2018, cost savings from VHEPC procurement activities reached $2.9 million for Virginia Tech and a total of $13.9 million for the 13 member institutions. Virginia Tech has made a financial commitment to the collaboration of $120,866 since 2015 and has realized a 121 percent annualized return on investment over the last four years. Overall, Virginia Tech has experienced cost savings of 21 percent by utilizing VHEPC negotiated contracts

compared to spend on previous institutionally issued contracts or “piggybacking” off cooperative contracts from another institution or national group purchasing organizations.

Member institutions of the VHEPC are: Virginia Tech, University of Virginia, George Mason University, James Madison University, Virginia Military Institute, Radford University, Longwood University, Virginia Commonwealth University, Old Dominion University, The College of William and Mary, University of Mary Washington, Christopher Newport University and the Virginia Community College System.

Identified Virginia Tech Cost Savings by Contract from VHEPC efforts

VHEPC has identified cost savings by comparing established collaborative VHEPC negotiated contracts to pricing offered in previous standalone institutional contracts with the same companies. The Fisher Scientific contract was the first VHEPC advertised and negotiated contract on behalf of all institutions, with Virginia Tech serving as the lead institution through negotiations and award of the contract that is now providing savings to all member institutions.

The table below demonstrates the volume of cost savings realized by Virginia Tech benefiting from the collaborative spend approach:

Cost Savings Realized by Virginia Tech since FY 2016 via VHEPC Collaborative Contracts (In Thousands)

VIRGINIA TECH – Contract/Vendor	Commodity Description	FY 2016	FY 2017	Thru Q1 FY18	Sum of Total
Fisher Scientific	Lab Supplies	$700	$1,300	$167	$2,167
Vantage Point Logistics	Inbound Freight		$119	$38	$157
Grainger	MRO	$37	$110	$102	$249
Bio-Rad	Lab Supplies		$ 65	$52	$117
Ferguson	MRO		$35	$11	$46
Sigma-Aldrich	Lab Supplies		$32	$20	$52
Enterprise	Vehicle Rental		$31	$9	$40
Specialty Underwriters	Equipment Maintenance Alternative		$20	$20	$40
Amtek	Lab Supplies		$10		$10
SHI	IT Peripherals		$2	$2	$4
GovSmart	IT Peripherals		$1	$1	$2
Total Costs Savings - VT					**$ 2,884***
Total Costs Savings-VHEPC					**$13,163***

*These savings are expected to continue for future years of the contracts

Attachment B

Cost Savings Contracts

Internally, Virginia Tech Procurement has 475 negotiated term contracts in place for the purchase of recurring material and service commodities. Trackable cost savings from the negotiations of these contracts total $10.6 million. Highlights of some of those savings are as follows:

Contract	Commodity	Procured By	Projection of Annual Cost Savings	Comments
Gasoline and Diesel Fuel	Fuel	RFP*	10% on regular deliveries, 20% on bulk deliveries	Had historically been procured via IFB**. Negotiations resulted in much lower pricing and higher level of service.
Athletic Travel Management	Travel Services	RFP	$186,972 in service costs across all travel modes	Historically, Athletics managed its own team travel. Awarded vendor, Anthony Travel, is leader in industry.
Short Term/Long Term Disability	Insurance	RFP	$318,000 annual savings realized by lower premiums for employees	Very competitive procurement with additional savings received through negotiations with major firms in the industry.

*Request for Proposal
**Invitation for Bid

Procurement Activities Supporting Operational Efficiencies

Amazon Business e-Catalog within the HokieMart e-procurement system
Program Launched April 13, 2018

University departments made on average $1.4 million in purchases from Amazon.com on university pcards. This resulted in $1.4 million of spend not being captured within our e-procurement system and therefore not included in the purchasing pre-approval process. In addition, spend data was not captured at a line item detail level, which limits analysis of the commodities departments were purchasing. Instead, Amazon purchases were approved after the purchase through the reconciliation of the pcard monthly billing statements.

Through a new partnership between Virginia Tech and Amazon Business, the university is now one of the first higher education institutions in the country to implement its own Amazon e-catalog within its own e-procurement system. Purchasing rules have been established through functionality within HokieMart to replicate the same levels as discretionary departmental purchasing limits. This was done strategically in an effort to manage the impact to other university strategic vendors who provide a level of customer service and expertise not available from a large online retailer like Amazon. With the transition of Amazon spend from the university's pcard to the university's e-procurement system, routine reports can be used to analyze the type of products departments are purchasing with their discretional departmental delegation with Amazon. These analyses will assist in negotiations of future contracts.

In the first month of the launch of the HokieMart e-catalog with Amazon, more than 600 departmental users utilized the e-catalog and made over $250,000 in purchases.

Intelligent Lockers to supplement package delivery/mail operations to students
Ongoing – future deployment, fall 2018

Through a public Request for Proposal process, the university awarded a contract to Telezgology, Inc. for the installation of intelligent lockers around the university's residence halls to supplement package delivery for the students. This project is expected to be fully installed for the fall of 2018. These intelligent lockers will allow for electronic notification to students when a package is delivered. A personalized PIN and locker number are provided to the student which makes package delivery and pick up a self-service function for the students. The lockers are located conveniently on campus to allow for continuous package delivery to students.

Value-Added Procurements

The following are examples of recent procurement activities that fall in this category:

Contract	Commodity	Value Added	Comments
Study Abroad Insurance	Insurance	Expanded coverage to include most of all international travel situations	Also enhanced communication with faculty and students travel overseas.
VT Magazine Print Ad Sales/Commissions	Advertising	Projected to triple expected commissions. Increased advertisers and aligned with advertisers already in Athletics publications	Awarded to IMG
Turnkey Tailgate Services for VT Football Games	Services	New Program for VT Athletics. Revenue generation. Provides a first class tailgate village experience	Awarded to Tailgate Guys. First university in Virginia to offer this concept.

Procurement Opportunities

June 4, 2018

DWIGHT SHELTON,
INTERIM SENIOR VICE PRESIDENT FOR OPERATIONS AND ADMINISTRATION, VICE PRESIDENT FOR FINANCE AND CFO

MARY HELMICK,
DIRECTOR OF PROCUREMENT

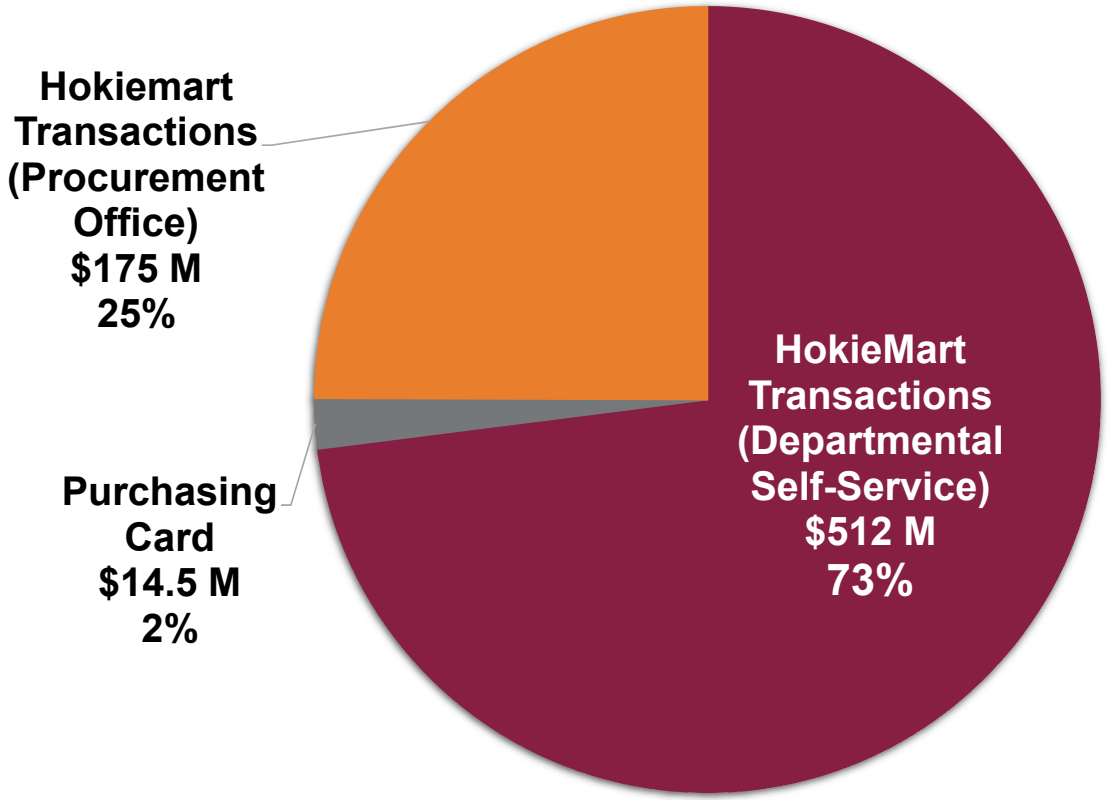
VIRGINIA TECH™

Background and Introduction

- Three strategic objectives:
  - Cost Savings
  - Value-Added Opportunities
  - Operational Efficiencies
- Three delegated areas of procurement:
  - Direct purchasing authority by departments for items under $2,000
  - Decentralized information technology hardware and software acquisitions
  - Decentralized capital construction procurement

Procurement

$702 Million in Spend



Operations

- Internal Buyers/Solicitations
- HokieMart e-Procurement Platform – campus wide
- Virginia Higher Education Procurement Consortium (VHEPC)
- Virginia Association of State College and University Purchasing Professionals (VASCUPP)
- Small, Women-owned, and Minority-owned Businesses (SWaM) Initiative

Cost Savings

- **VHEPC Procurement Efforts –**
  - Virginia Tech has benefitted from $2.9M in savings
  - All member universities have benefitted from $13.1M in savings
- **Recently Awarded from Internal Procurement Efforts –**
  - Negotiated 475 term contracts for purchase of re-occurring materials and service commodities resulting in total trackable cost savings of $10.6 million
    - Athletic Travel Management – potential of $186K annually in travel expenses in Athletics
    - Short Term/Long Term Disability - $318K annualized savings (lower premiums for employees)
    - Prime Food Vendor - $300,000 annual savings

Efficiencies Gained and Value-Added

- **Amazon Business e-Catalog within HokieMart**
  - Removal of $1.4 Million from Pcard Spend
  - Reduction of Fraud Risk from point of purchase
  - Standardized approvals to be consistent with other procurement protocol
  - Provides improved environment for procurement of a highly favored and very active vendor on campus
- **Intelligent Package Delivery Lockers for Students**
  - Improves service and convenience for students and creates an environment desired by students

Recent Revenue Generating Procurements

- **Turnkey Tailgating Services for VT Football Games**
  - Commission Revenue to Athletics based on annual gross revenue
  - Athletics received a $100,000 signing bonus in FY17
- **VT Magazine Print Ad Sales**
  - Commission Revenue to University Marketing

Future Opportunities

- **Standardization**
  - University-Wide Inbound freight Program - *Implemented*
  - Promotional Products
  - Catering
- **Operational Efficiencies**
  - Increasing Department Direct Purchase Delegation
  - Optimizing HokieMart for Future Enhancements

Future Challenges

- Protection of the University's purchasing autonomy from Commonwealth of VA
- Resistance to standardization, reduction of choice for departments

Questions

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VIRGINIA TECH

Resource Development

June 4, 2018

DWIGHT SHELTON,
INTERIM SR. VICE PRESIDENT FOR OPERATIONS AND ADMINISTRATION

TIM HODGE,
ASSOCIATE VICE PRESIDENT FOR BUDGET AND FINANCIAL PLANNING

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Overview

- Review three distinct tuition models in use by Virginia public institutions
- Consider the varying impact on students as they progress through four years of undergraduate education
- Consider the varying institutional revenue impact as each model is implemented
- Provide commentary on potential benefits and challenges of each tuition model

Tuition and Fee Approaches in Virginia

- **Traditional Annual Increase**: annual assessment of revenue needs
  - Driven by annual changes in cost and state support
  - Applied in the same amount to common categories of students

- **Cohort-based**: annual assessment of incoming student costs over 4 years
  - 4 years of estimated cost increases, which would normally include factors for:
    - Estimated annual inflationary increases
    - Additional assessment for new initiatives or risk mitigation
  - Price is front-loaded in early years and held constant across 4 years
  - Provides predictability for student and family planning

- **"Tuition Reset"**: one-time repositioning of price for entering students
  - Aligns costs with market-demand
  - Can be implemented in one or multiple entering classes
  - Inflationary increases assessed annually
  - Allows one-time institutional repositioning of programs
    - Example: significant realignment of student financial aid or compensation

Virginia Public Four-Year Institutions
Resident Undergraduate Tuition and E&G Fees for 2018-19

Institution	2018-19 $	Increase %	Increase $	
William and Mary	$ 17,570	6.4%	$ 1,064	(1)
James Madison University	7,250	16.0%	1,000	(1)
Christopher Newport University	9,100	10.0%	830	
Virginia Commonwealth University	12,247	6.7%	764	
Radford University	7,980	7.0%	519	
Virginia Military Institute	9,284	4.5%	400	
George Mason University	9,060	4.5%	388	
University of Virginia	14,148	2.4%	338	(2)
Virginia Tech	11,595	2.9%	332	
University of Mary Washington	8,554	3.0%	248	
Virginia State University	5,769	4.0%	222	
Norfolk State University		*TBD*		
University of Virginia's College at Wise		*TBD*		
Old Dominion University		*TBD*		
Longwood University		*TBD*		

(1) Rate for entering freshmen.

(2) Rate for entering first years.

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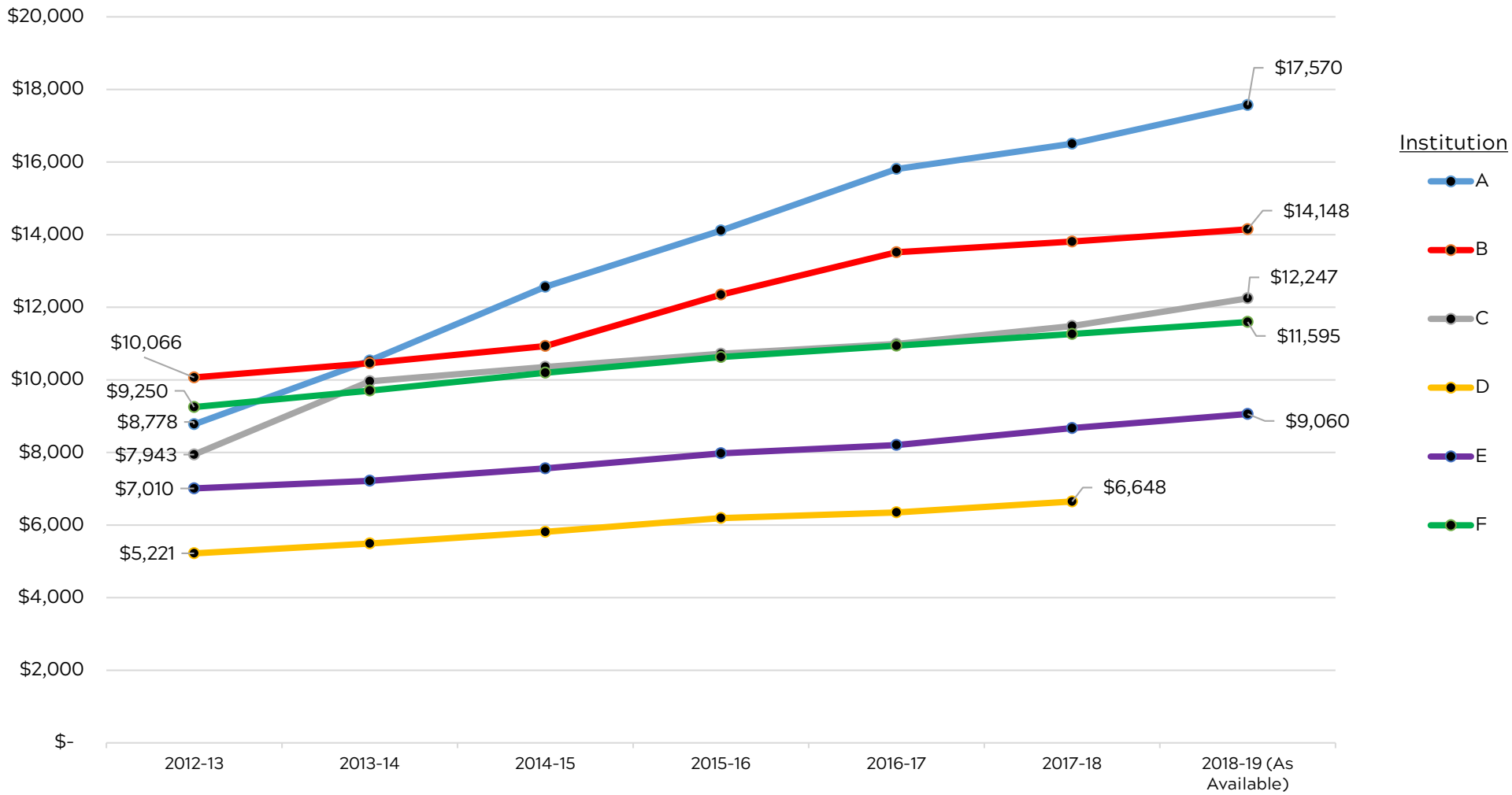
Trend of VA Public Research Institutions Resident Undergraduate Tuition & E&G Fees



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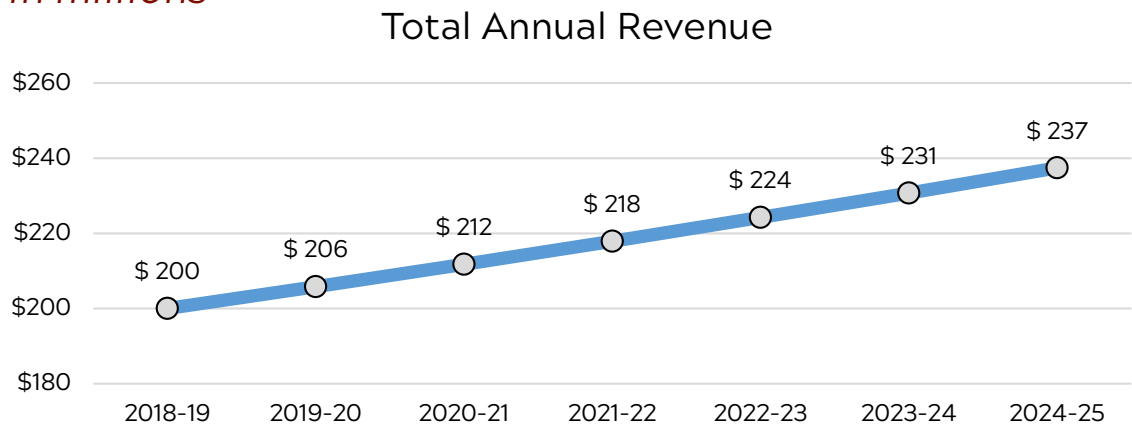
Traditional Annual Increase Example

Revenue $s in millions

Assumptions:

- Total population of 20,000 students
- Starting rate of $10,000/year
- Annual increase of 2.9%



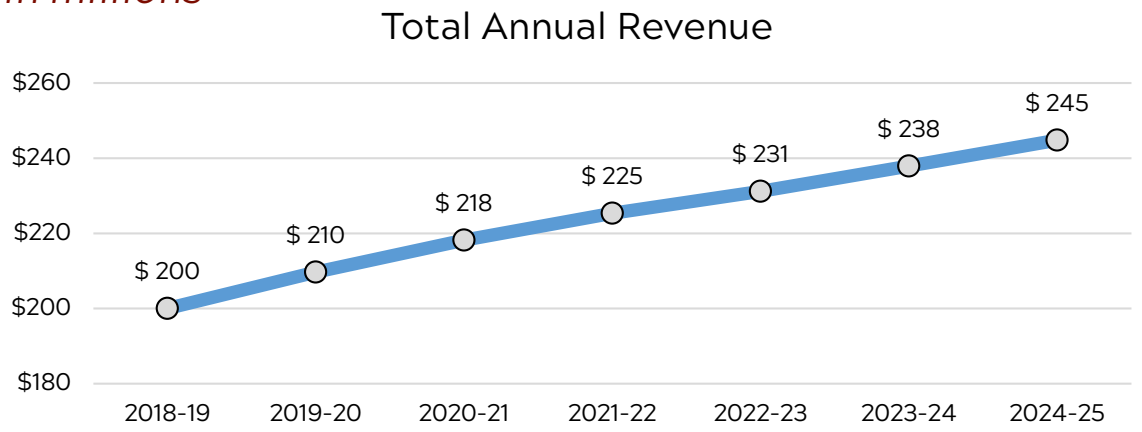
	2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25	
Admit Term	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue
Prior to 2019-20	10,000	$ 200	10,290	$ 154	10,588	$ 106	10,895	$ 54						
2019-20			10,290	51	10,588	53	10,895	54	11,211	$ 56				
2020-21					10,588	53	10,895	54	11,211	56	11,537	$ 58		
2021-22							10,895	54	11,211	56	11,537	58	11,871	$ 59
2022-23									11,211	56	11,537	58	11,871	59
2023-24											11,537	58	11,871	59
2024-25													11,871	59
Total Annual Revenue		$ 200		$ 206		$ 212		$ 218		$ 224		$ 231		$ 237

Cohort-based Example

Revenue $s in millions

Assumptions:

- Virginia Tech interpretation of model methodology
- Total population of 20,000 students
- Starting rate of $10,000/year
- Fixed Rate per Cohort
- Built-in Annual increase of 2.9%
- Risk mitigation factor of 3.0%



	2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25	
Admit Term	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue
Prior to 2019-20	10,000	$ 200	10,290	$ 154	10,588	$ 106	10,895	$ 54						
2019-20			11,069	55	11,069	55	11,069	55	11,069	$ 55				
2020-21					11,390	57	11,390	57	11,390	57	11,390	$ 57		
2021-22							11,720	59	11,720	59	11,720	59	11,720	$ 59
2022-23									12,060	60	12,060	60	12,060	60
2023-24											12,410	62	12,410	62
2024-25													12,770	64
Total Annual Revenue		$ 200		$ 210		$ 218		$ 225		$ 231		$ 238		$ 245

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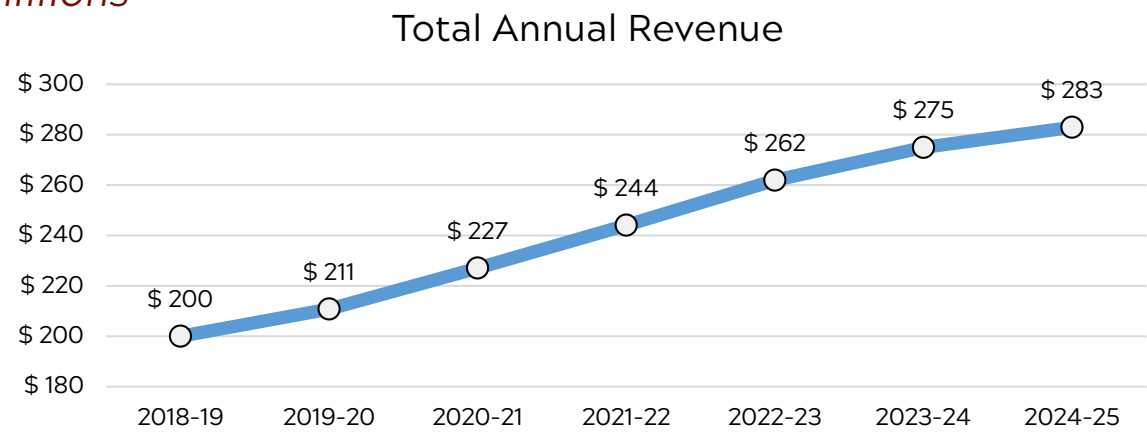
"Tuition Reset" Example

$s in millions

Assumptions:

- Virginia Tech interpretation of model methodology
- Total population of 20,000 students
- Starting rate of $10,000/year
- Annual increase of 2.9%
- Step increase of $1,000 in FY20 and FY21



	2018-19		2019-20		2020-21		2021-22		2022-23		2023-24		2024-25	
Admit Term	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue	$ Per Student	Cohort Revenue
Prior to 2019-20	10,000	$ 200	10,290	$ 154	10,588	$ 106	10,895	$ 54						
2019-20			11,290	56	11,617	58	11,954	60	12,301	$ 62				
2020-21					12,617	63	12,983	65	13,360	67	13,747	$ 69		
2021-22							12,983	65	13,360	67	13,747	69	14,146	$ 71
2022-23									13,360	67	13,747	69	14,146	71
2023-24											13,747	69	14,146	71
2024-25													14,146	71
Total Annual Revenue		$ 200		$ 211		$ 227		$ 244		$ 262		$ 275		$ 283

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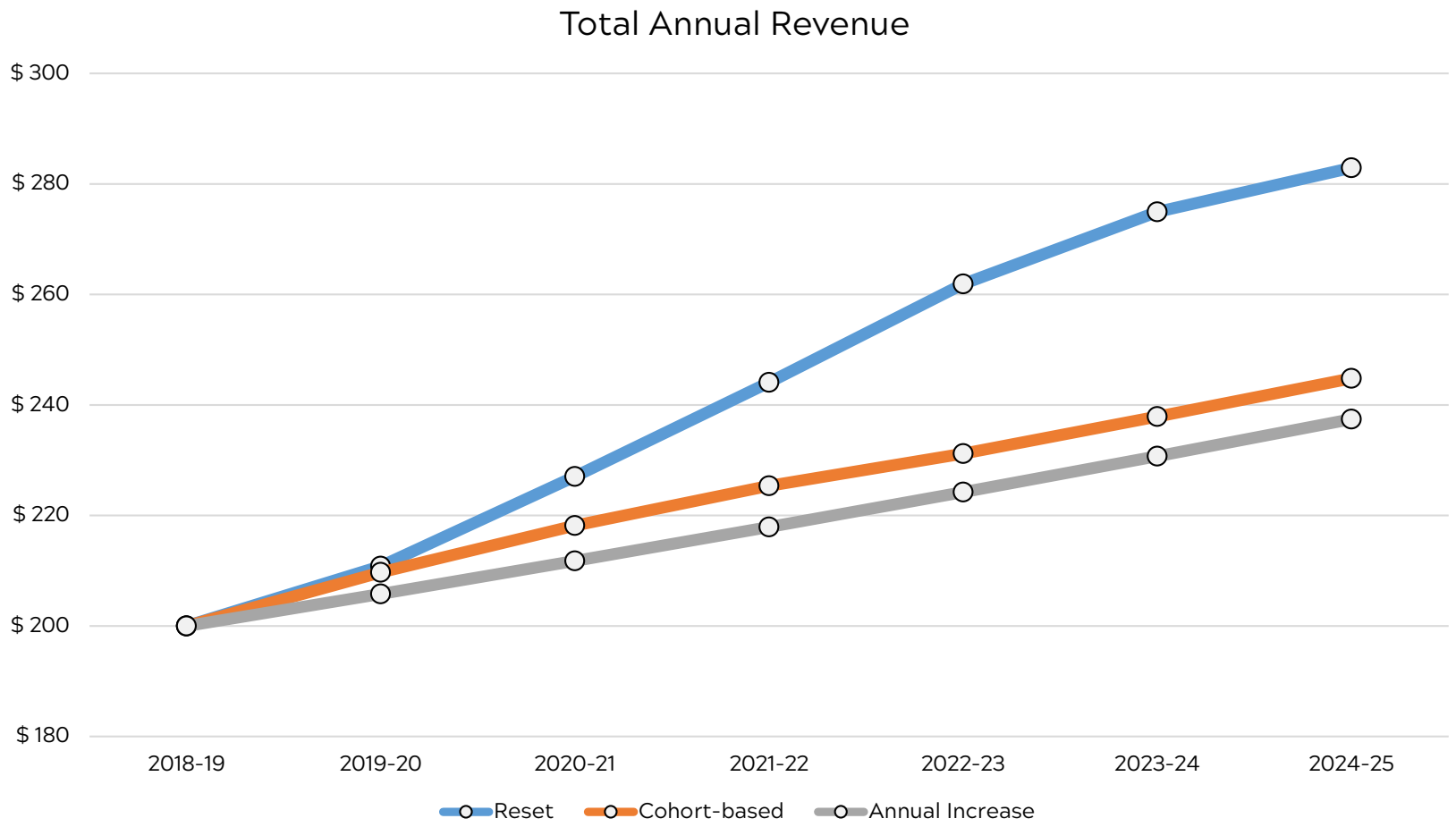
Comparison of Examples

$s in millions



VIRGINIA TECH

Discussion

Committee Minutes

GOVERNANCE AND ADMINISTRATION COMMITTEE
Room 170, New Classroom Building
June 3, 2018

Committee Members: Mehul Sanghani (Chair), Mehmood Kazmi, Jeff Veatch,

Other Board Members: Greta Harris, Charles T. Hill, Anna James, Letitia Long, Robert J. Mills, Jr., Chris Petersen, Debbie Petrine (Vice Rector), Michael Quillen, Wayne H. Robinson, Dennis Treacy (Rector), Horacio Valeiras.

Representatives to the Board: Seyi Olusina, Brett Netto, Hans Robinson, Robert Sebek

VPI & SU Faculty, Staff, and Students: Kim O'Rourke, Lorenzo Amani, Mac Babb, Whit Babcock, Lori Buchanan, Allen Campbell, Cyril Clarke, Shelia Collins, Al Cooper, Steve Filipiak, Ron Fricker, Deborah Fulton, Susan Gill, Dee Harris, Kay Heidbreder, Rachel Holloway, Rachel Iwicki, Sharon Kurek, Curtis Mabry, Theresa Mayer, Heidi McCoy, Robin McCoy, Ken McCrery, Ross Mecham, Nancy Meacham, Scott Midkiff, Sally Morton, Mike Mulhare, April Myers, Kelly Oaks, Mark Owczarski, Patty Perillo, Ellen Plummer, Menah Pratt-Clarke, Scot Ransbottom, Dwight Shelton, Timothy Sands, Savita Sharma, Kayla Smith, Laurie Stacy, Jon Clark Teglas, Tracy Vosburgh, Lisa Wilkes, & Sherwood Wilson

OPEN SESSION

1. **Welcome and Opening Remarks.** The start time of the committee meeting was delayed, and the committee was convened at 4:22 pm. Mehul Sanghani, Chair of the Governance and Administration Committee, welcomed committee members, guests, and invited presenters. He then provided a brief overview of the committee's scope, as well as information regarding the charge given to the committee by the Rector of the Board to provide recommendations to the Task Force on Board Structure and Governance regarding the student representative selection process, governance, and committee assignments.

2. **Consent Agenda.** The committee approved the items listed on the Consent Agenda.

    a. Minutes of the November 6, 2017, Meeting
    *(**Note**: This committee did not meet in conjunction with the March 2018 Board of Visitors meeting)*

3. **Update on Search for the Vice President for Human Resources.** M. Dwight Shelton, Jr., Interim Senior Vice President for Operations and Administration, and chair of the search committee for the new Vice President for Human Resources,

provided the committee with an update on the status of the search that is nearing completion.

4. **Overview/Status Report on Human Resources Transformation Project.** Lisa Wilkes, Interim Vice President for Human Resources, provided the committee with a status report on the ongoing Human Resources Transformation Project.

   Dr. Wilkes began with a brief overview of the transformation project, explaining that the department is moving away from a decentralized, administratively focused model, to a more centralized function that emphasizes the consultative and strategic values of an HR Department, while also maintaining its current administrative functions. Virginia Tech is not the only institution moving to this model, as UVA, Penn State, and Ohio State are also undergoing similar transformations of their own in an effort to prepare for changes in the workforce, as well as in the digital/mobile world. Currently, the focus of Virginia Tech's project has moved from the administrative to the consultative and strategic arms of the new model, as the organizational structure of the department is being put into place and consulting teams are emerging. A Conceptual Framework for Strategic Engagement has been proposed that focuses on 1) Organizational Capacity, achieved through recruiting and retention strategies, and 2) Organizational Competency, achieved through learning and development strategies. Benefits of the proposed framework include proactively identifying and addressing needs; enhancing old and creating new programs/services to retain talent and strengthen employee morale and engagement; creating consistency and equity in service delivery, policy, and practices; and aligning faster and simpler processes to reach university goals. The guiding principles behind the framework and its goals are to ensure that the HR function is strategic and collaborative, and that the university possesses the workforce capacity and competencies to achieve its mission, vision, and strategic priorities. Along with that, the department aspires to design, develop, and deliver strategic programs and services that are accessible, inclusive, and supportive of all faculty and staff, in order to achieve their goal of being effective and responsible stewards of university resources. Challenges and opportunities include building a future state while maintaining the current state in a multi-year initiative, establishing metrics and analytics to allow for data-driven decisions, and planning for the future workforce while keeping both current and new employees engaged. Overall, the university is well-positioned to become a national leader in human resources as the transition continues, and the people of the university remain and will always be its greatest asset.

5. **Information Technology Presentation.** Scott Midkiff, Vice President for Information Technology and Chief Information Officer, presented to the committee on the Division of Information Technology, its mission, and its alignment with the university's mission and strategic initiatives, with emphasis on teaching and learning and research computing.

The mission and goals of the Division of IT are to support and enable the mission and goals of the university in all areas. In the area of teaching and learning, the Division of IT supported 85 Virginia Cyber Range courses this past year in 40 Virginia high schools, 6 community colleges, and 7 universities, with a total of over 500 student and instructor accounts. These courses allow for isolated network environments in which students can safely complete hands-on cybersecurity exercises and competitions. Along with that, the Division also continued to support diverse teaching and learning models, from fully online courses, to hybrid classes, to technology-mediated learning, to technology-assisted learning using lecture capture. The Division's focus is on people and ideas, as well as technology, as it strives to enable innovation in teaching and learning, as well as course redesign and accreditation, while also maintaining and promoting best practices. This past year the university saw a shift in technology, introducing Canvas, the new learning management system; Kaltura, the new lecture capture and video content management system; and Zoom, the new videoconferencing system. Ninety-three percent of this year's graduating undergraduates took at least one online class, almost half of which actually took more than three online courses. In the realm of Research, the Division has worked to allow open access to high-performance computing systems and storage, as well as invested in the computing program for priority access for participating researchers. Currently, high-performance computing resources are supporting 249 projects across the university. The Division has also worked to ensure data and security compliance for researchers in order to create secure research environments, while also addressing the growing demands for both network capacity and storage. The university is demonstrating an ever-growing demand for wireless availability on campus, particularly outdoors; on a single day this spring, the wireless network carried 80 terabytes of data. Opportunities and challenges for the Division include recruiting, retention, and professional development of their workforce, as well as a shift in funding needs, as there is a movement from "buying" to "subscribing" to software because of the cloud.

6. **Presentation of the Falcon Social Tool.** Tracy Vosburgh, Senior Associate Vice President for University Relations, presented to the committee on the Falcon social tool and its ability to monitor the university's social media footprint, as well as facilitate more effective means of sharing news with the community across various platforms. She was joined by Mac Bab and Mike Mulhare, who spoke to the utilization possibilities of the tool for each of their respective areas.

   Currently, the university does not utilize a shared system to coordinate, align, and monitor Virginia Tech's social media footprint across all units; everything is done individually. In a strategic effort to do so, a one-year contract was recently signed for the testing of Falcon, a social tool that provides means to better collect and analyze data, as well as the ability to post and monitor updates on all platforms simultaneously. Mike Mulhare, Assistant Vice President for Emergency Management, presented a case study showcasing vt.edu web traffic on a typical day vs. a day on which an emergency incident occurred, specifically noting the

spikes in web traffic that occurred as VT Alerts were released. He also presented comparisons of web traffic related to three separate emergency incidents, which further illustrated the fact that many individuals are relying more and more on the web and social media to obtain information. Therefore, the use of such platforms can prove to be very beneficial when it comes to crisis management and communicating with the Virginia Tech Community. Deputy Chief Mac Babb of the Virginia Tech Police Department spoke to the fact that the VTPD currently has no social media management tools and how the implementation of such a tool would assist in the areas of threat assessment, engagement, and the overall ability to share information with the community in a more timely and effective manner. The goal for the implementation of Falcon is that it will successfully allow for better management of the university's online reputation, pave the way for more data-driven driven decisions, and ensure more proactive and reactive approaches across the board in relation to social media.

7. **Presentation of Student-Athlete Demographics.** Whit Babcock, Director of Athletics, presented to the committee on both Student-Athlete and Athletics' Faculty and Staff demographics, as well as spoke to the department's current and ongoing diversity and inclusion initiatives.

   Athletics is one of the most diverse units on campus, as the student-athlete population enhances the entire student body population, and the department is recruiting in non-traditional high schools in Virginia. In an effort to make the unit even more dynamic, creative, and responsive, the department also strives to continue the trend of building a faculty and staff population that reflects that of their student-athletes. From July 1, 2017 to April of 2018, 23% of Athletic Department hires were from unrepresented groups, as were six of the ten Head Coaches that have been hired since 2012. In the spring of 2017 the department formed the Athletics Diversity and Inclusion Committee, and have since implemented several initiatives to better inform and educate both its students and its employees alike. Such initiatives include various lectures and trainings presented to both students and staff, department representation on various diversity and inclusion related committees, and financial contributions and sponsorships made on behalf of the department in support of events and groups that promote and value inclusion and diversity initiatives.

8. **Future Agenda Items and Closing Remarks.** Mehul Sanghani, Chair of the Governance and Administration committee, discussed future agenda items for the committee. He then offered closing remarks and requested a motion for adjournment.

There being no further business, the meeting was adjourned at 5:46 p.m.

Board of Visitors

Division of Human Resources Transformation Update

Lisa J. Wilkes, Ph.D.

Interim Vice President, Human Resources
June 3, 2018

HUMAN RESOURCES
VIRGINIA TECH

Change vs. Transformation

- Change – “implementing finite initiatives, which may or may not cut across the organization.”

- Transformation – “reinvent[ing] the organization and discover[ing] a new or revised business model based on a vision for the future.”

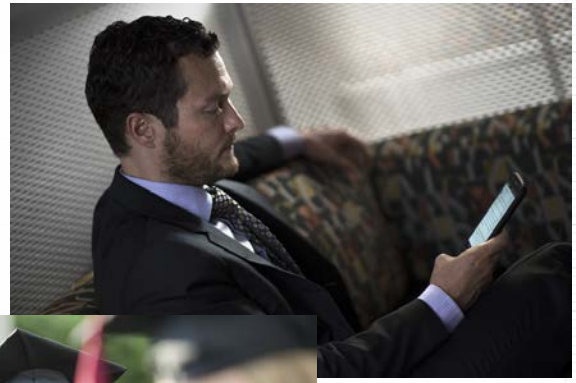
Ashkenas, R. (Janurary 15, 2015). We Still Don’t Know the Difference Between Change and Transformation. *Harvard Business Review.* Retrieved from https://hbr.org/2015/01/we-still-dont-know-the-difference-between-change-and-transformation.

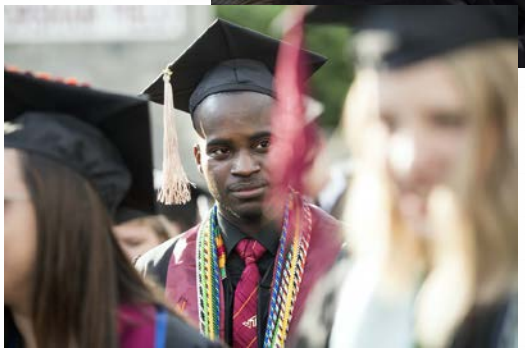
What is the HR Transformation?

- Intentional, thoughtful evolution.
- Talent- and people-focused.
- Centered around university vision, mission, strategic goals.
- Multiple change management projects.

Why transform Human Resources?

- Changing workforce demographics.
- Rapidly changing environment; digital/mobile world.
- Increased competition for talent.
- Inconsistent HR practices.
- No uniform HR strategy.
- Transactional-based focus.
- Develop programs that support the university's vision, mission and strategic goals.





Setting the stage for change. Did you know?

- The Millennial generation (~ages 24 to 38) is expected to overtake Baby Boomers (~ages 54 to 72) in population in 2019. Millennial numbers will swell to 73 million and Boomers decline to 72 million.
- Generation X (~ages 39 to 53) is projected to pass the Boomers in population by 2028.
- 328 million new devices connect to the internet each month. By 2020, there will be 50 billion connected devices.
- There were 6.6 million job openings as of March 2018, up from 2.2 million in 2009.

These are just a few facts that are driving our HR transformation.

National Workforce Trends

Future Workforce Trends

- Workforce is aging.
- Workforce is becoming more diverse.
- Workforce continues to become more educated.
- Globally, US labor force will continue to shrink.

Actions for Consideration

- Use data for workforce planning and identifying shifting demographics.
- Develop cross-generational and diverse talent pipelines.
- Develop talent strategies for workforce segments at all ages and different stages of their careers.

Source: Meet the US Workforce of the Future, Deloitte Review, July 2017

To address these imperatives, We must:

- Understand and solve for the needs of employees and managers to achieve results for the university.
- Use predictive analytics to anticipate change in the workforce and economy.
- Align HR goals with university goals.
- Design solutions and inform choices to be a strategic partner to line managers, who are primary owners of talent, leadership and culture.
- Help leaders balance risk.

Our journey towards transformation

- February 2016 – April 2016
  - Engaged Sibson Consulting to review human resource practices and processes.
  - Interviewed HR employees, key stakeholders, and executive management.
- May 2016 – March 2017
  - Reviewed findings and recommendations with key stakeholders.
  - Established HR Executive Committee – provide strategic oversight.
  - Established HR Advisory Committee – develop new HR model.
- April 2017 – July 2017
  - Formalized conceptual framework for new HR model.
- August 2017 – present
  - Established HR division and organizational framework to support new model.
  - Implementing process improvements (over 100 completed thus far).
  - Refining conceptual framework to support strategically focused HR function.
  - Implementing new programs and services in support of strategic HR.
  - Establishing HR Divisional Directors.
  - Launched national search for vice president for human resources.

The model under which we operated

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The model we are moving toward

1. Strategic Value and Leadership (25% of all time and investments)

- Building organizational competencies
- Developing and delivering effective retention, succession and recruiting strategies
- Driving culture and leading change

Central

2. Consultative Value (50% of all time and investments)

- Guiding and supporting leaders and managers on workplace needs and issues
- Consulting with employees on workplace needs and issues

Local

3. Administrative Value (25% of all time and investments)

- Payroll and Benefits Administration
- Record Keeping
- Compliance

Shared Services

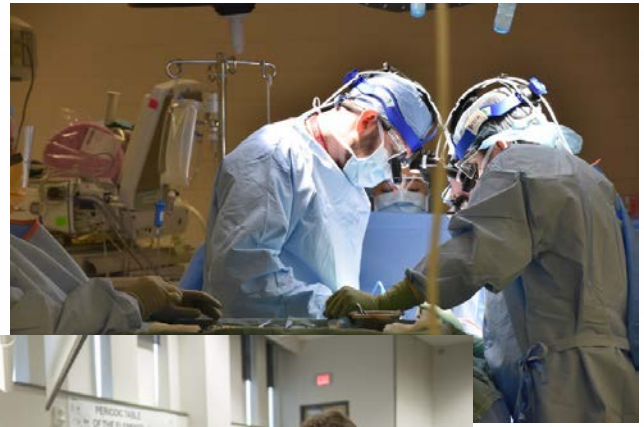
Our Vision

We claim our role in fostering an inclusive and engaged culture of excellence that enables Virginia Tech employees to serve as a force for positive change in a world without boundaries.

Our Mission

We will innovate to serve Virginia Tech as a best-in-class partner by providing:

- **Strategic** services that enhance the university's ability to attract, retain and develop talent.
- **Consultative** services that create workplace solutions through strengthened collaboration.
- **Administrative** services that deliver simple, timely, and accurate HR processes and information.



HR Organizational Structure – Spring 2018

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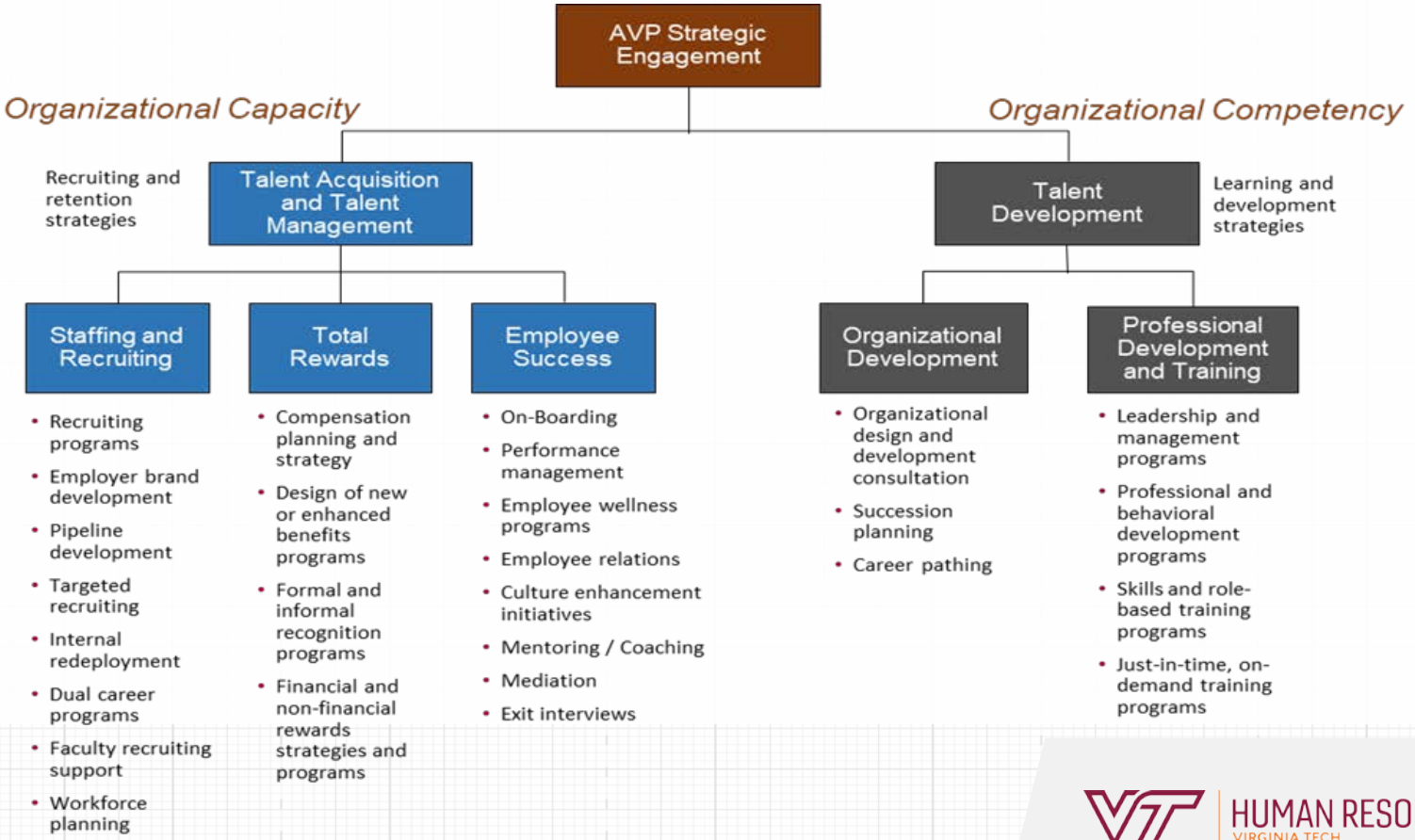
Conceptual Framework – Strategic Engagement



Benefits of New Framework

- Proactively identifies and addresses university human resource needs – right people and talent to achieve goals.
- Enhances current programs/services and develops new programs/services to retain talent and reward employees.
- Creates consistency and equity in the delivery of HR services, policies and practices.
- Reduces institutional risk by embedding HR professionals in each college/ division.
- Strengthens morale and employee engagement.
- Aligns faster, simpler HR processes that are aligned to university goals.

Guiding Principles

- Ensure HR is a strategic, collaborative partner.
- Ensure that the university has the workforce capacity and competencies to achieve our mission, vision, and strategic priorities.
- Design, develop, and deliver strategic HR programs and services that are accessible, inclusive, and support all faculty and staff.
- Ensure that HR supports the goal of being effective and responsible stewards of university resources.
- Use data and metrics to make informed workforce decisions.
- Manage transformation and multiple change initiatives.

Challenges/Opportunities

- Manage/embrace change – significant cultural and operational change.
- Develop strategic partnerships/collaborations.
- Maintain “current state” while also building “future state.”
- Ensure transformation decisions are thoughtful and intentional.
- Allocate resources – significant investments will be required (e.g., positions, programming support, IT infrastructure).
- Sustain action – multi-year initiative.
- Understand HR data and establish metrics and analytics to drive decisions.
- Address immediate workforce needs and plan for future workforce.
- Communicate “future state” HR programs, services, structure.
- Engage employees.

Summary

- Organizational framework is developed.
- Resources have been allocated to support new service delivery model in benefits, service center, leave, and employee administration.
- Business process redesign on-going.
- Strategic Engagement and consulting teams are emerging and developing new programs and services.
- University is well-positioned to be national leader in human resources.
- Our people are our greatest asset.

2018 Service Award Program

776 employees
14,400 years of service

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Questions?

Division of Information Technology Update

Board of Visitors
Governance & Administration Committee
June 3, 2018

Scott F. Midkiff
Vice President for IT & CIO
midkiff@vt.edu
https://it.vt.edu

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Topics

- About the Division of Information Technology
- Aligning Information Technology with Virginia Tech's mission and strategic initiatives
  - Teaching and learning
  - Research
  - Operations and administration
  - Security
- Key takeaways

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About the Division of Information Technology

Division of IT Mission

The mission of Virginia Tech's Information Technology (IT) organization is to serve the university community and the citizens of the Commonwealth of Virginia by applying and integrating information resources to:

- Enhance and support **instruction, teaching and learning**;
- Participate in, support and enhance **research**;
- Foster **outreach**, develop **partnerships** with communities and promote the capabilities of advanced networking and communications; and
- **Provide, secure, and maintain systems** allowing the university to accomplish its missions.

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IT Strategic Plan, 2012-2018

Supporting the mission of the university

- Pillar 1: Enabling networked learning in the networked university
- Pillar 2: Providing competitive advantage through sustainable advanced cyberinfrastructure and collaboration
- Pillar 3: Leveraging information technology to distinguish the Virginia Tech experience
- Pillar 4: Advancing information technology for enterprise effectiveness

Positioning IT for the future

- Pillar 5: Ensuring the security and resilience of information technology resources
- Pillar 6: Improving communication with customers and partners
- Pillar 7: Strengthening the information technology organization

2012-2018 IT Strategic Plan: https://it.vt.edu/content/dam/it_vt_edu/strategic-documents/Virginia_Tech_IT_Strategic_Plan_2012-2018-v1-1-2013-06-12.pdf

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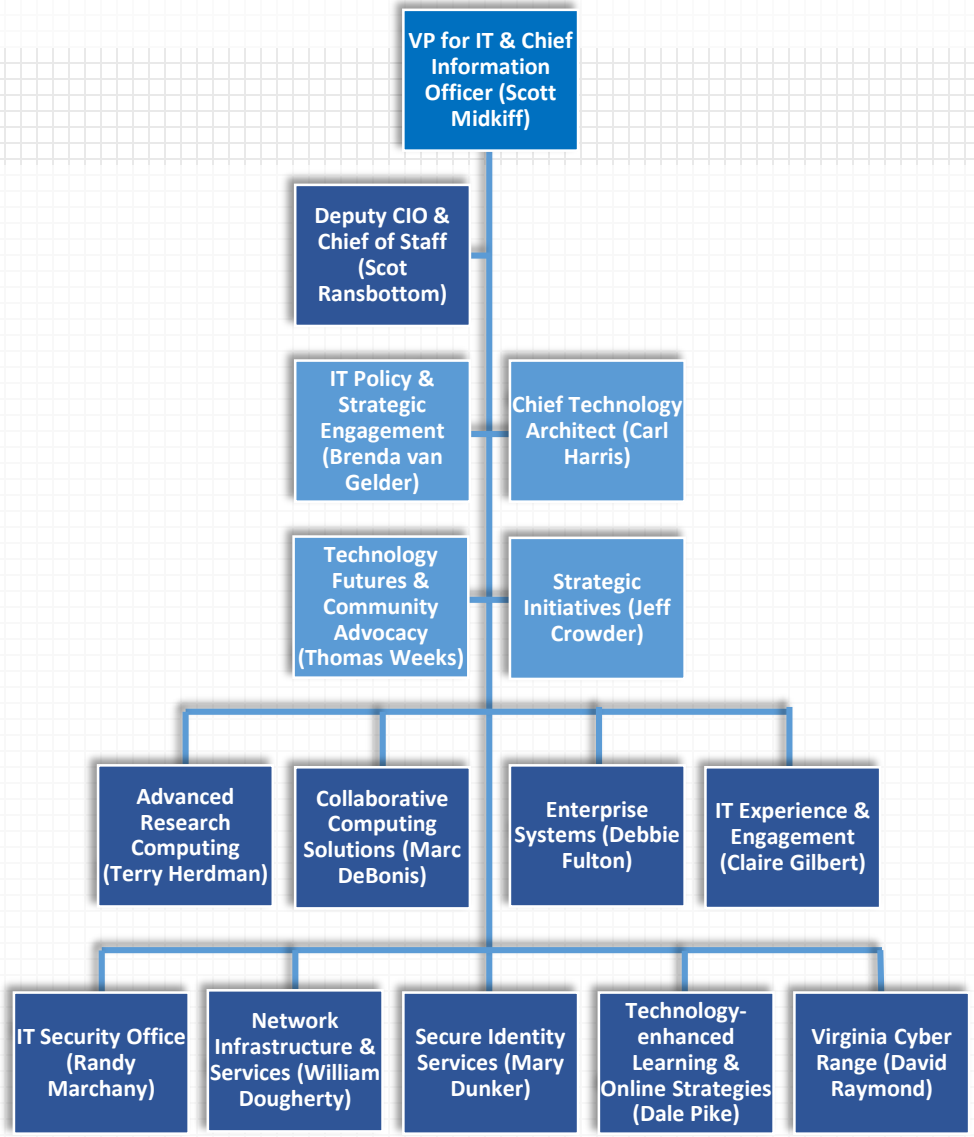
Division of IT Organization (1/3)



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Division of IT Organization (2/3)

- **Administration & Planning (A&P):** Provides communications, facilities, financial management, IT purchasing, personnel services, and project management for the Division of IT and the university (under the Deputy CIO and Chief of Staff)
- **Advanced Research Computing (ARC):** Provides services and support for high-performance computing, large-scale storage, and advanced visualization for the university's research community
- **Collaborative Computing Solutions (CCS):** Supports customer-focused services and infrastructure for collaboration tools, Microsoft technologies, and use of public cloud
- **Enterprise Systems (ES):** Provides enterprise-level services to the university including Ellucian Banner and application information systems, information warehousing and business intelligence, document management systems, database administration, application administration and integration, and web content administration and hosting
- **IT Experience & Engagement (ITE^2):** Serves as the "front door" for user support, coordinates user support activities across the Division of IT and beyond, and collaborates across the Division of IT to assess and improve user experience
- **IT Security Office (ITSO):** Provides tools and services, awareness, and guidance to help university units, faculty, staff, and students achieve a safe and secure IT environment for teaching, learning, research, outreach, and the conduct of university business (The associated IT Security Laboratory conducts and supports research and education in cybersecurity and provides students with experiential learning opportunities.)

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Division of IT Organization (3/3)

- **Network Infrastructure & Services (NI&S):** Provides network infrastructure for the university including wireless, Ethernet, voice services, high-data rate research connectivity, campus backbone, and wide-area networking; operates the university data center including enterprise, high-performance computing, and storage systems; collaboratively provides safety and security services; and leads special initiatives including a cellular distributed antenna system
- **Secure Identity Services (SIS):** Supports the university's online identity management and authentication processes and services to enable secure access to information resources and systems
- **Technology-enhanced Learning & Online Strategies (TLOS):** Works with programs and faculty to design effective learning experiences; provides training to enhance faculty digital fluency; explores innovation in teaching and learning using technology; and supports innovative physical and virtual learning environments for traditional, distance, and hybrid courses
- **Virginia Cyber Range:** Collaborates with Virginia universities, community colleges, and K-12 schools to make the Commonwealth of Virginia a national resource for cybersecurity education by operating a virtual environment for experiential learning, maintaining a repository of teaching resources, and building a community of practice in cybersecurity education
- **Office of the Vice President for Information Technology:** Leads the Division of IT and collaborates across the university and beyond to grow and transform the institution through technology; and provides specific support for the university's technology architecture, technology futures, IT policy, and engagement

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Aligning IT with Virginia Tech's mission and strategic initiatives

Teaching and Learning
Selected Recent Accomplishments

- Transition to Canvas learning management system (LMS)
  - More modern user interface
  - More flexible integrations
  - Hosted system
- Video for instruction transition
  - Zoom for videoconferencing; Kaltura for video content management
  - More modern and flexible capabilities
  - Improved cost containment
- Tools for academic integrity
  - iThenticate for checking originality of manuscripts, theses, and dissertations
  - Feedback Studio for checking originality of assignments (coming soon)
- Increased support for faculty innovation
  - Revamped faculty development program
  - Transition of InnovationSpace to Innovation and Outreach Studio
  - Creation of TLOS Learning Studio
  - Revamped faculty grant programs – 4-VA, course design and development, and innovation grants
- Virginia Cyber Range
  - State-funded cyber security education initiative for public K-12, community colleges, and universities

Teaching and Learning

Video for Instruction

Current Usage (Annual)

>150,000 attendees/students

>40,000 meetings

>3.6 million minutes of content

>160 courses recorded

KALTURA

zoom

- Replace Expiring Contracts for WebEx & Echo360
- Deepen Integration with Canvas and Other VT systems
- Allow for Asset Management & Data Collection
- Provide Upgraded Video Services for All Users

Planning & Implementation

2016	Spring 2017	Fall 2017	Nov.- Dec. 2017	Dec. 2017 - Jan. 2018	Jan.- May 2018	May 2018	Summer 2018 & Beyond
Video for Instruction Working Group Formed	Testing of Software & Hardware Options	RFP	Product Comparisons & Pilot	Purchase Decision & Contract Negotiations	Implementation & Stakeholder Communication	New Platforms Enter Production	Refine Self-Service Video Solutions
Analysis of Needs & Report						Current Contracts Expire June 2018	

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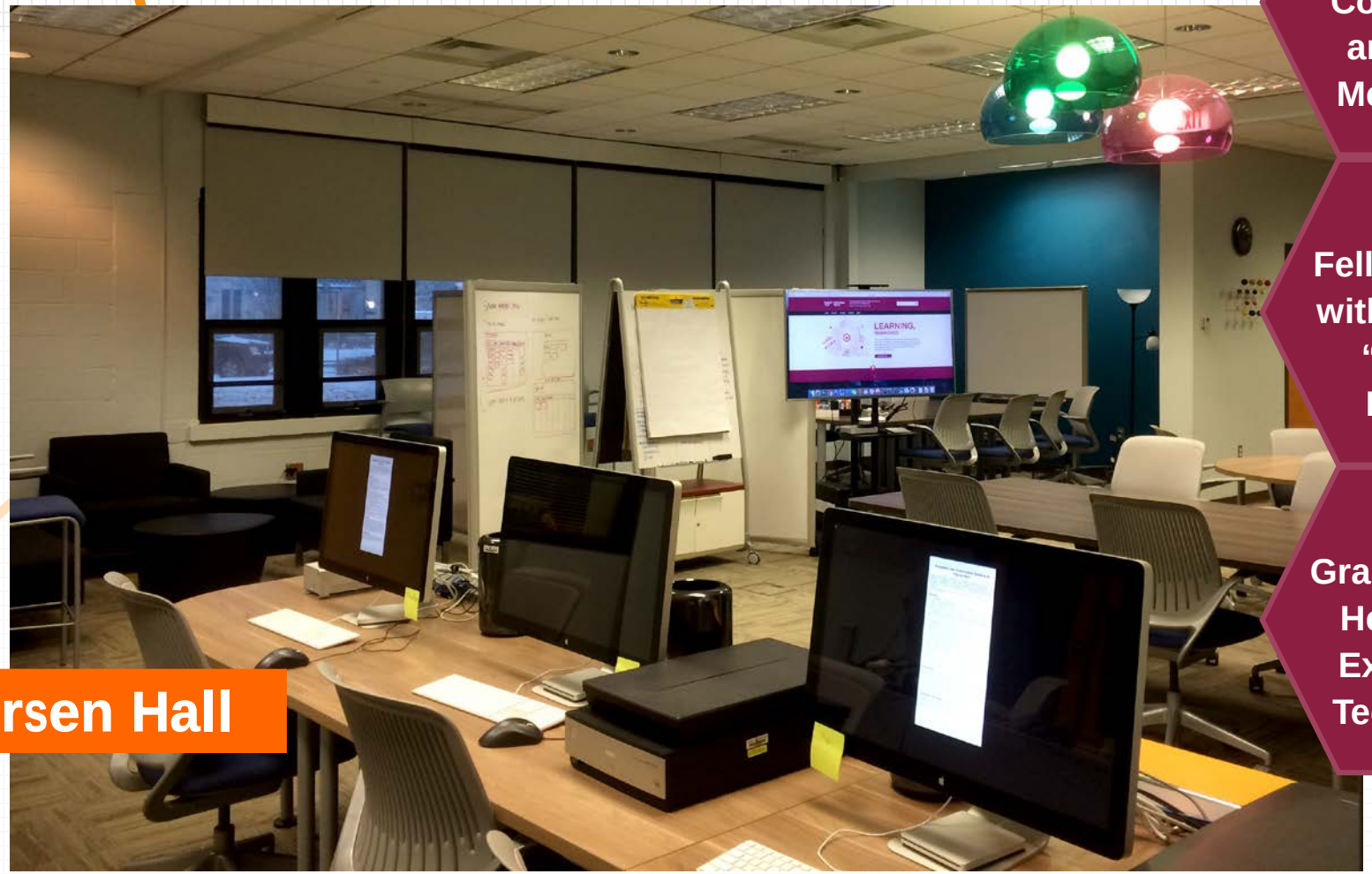
Teaching and Learning

Innovation/Outreach Studio



1140 Torgersen Hall

- Strengthens TLOS's Focus on Building Faculty Digital Fluency
- Provides Venue for Collaboration and Faculty Media Needs
- Expands User Experience and Design Thinking Offerings
- Student Fellows Partner with Faculty on "Sandbox Projects"
- Consolidates Student-Facing Media Services in Newman Library
- Updated Grant Programs Help Faculty Explore New Technologies

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Teaching and Learning

The Virginia Cyber Range

VIRGINIA CYBER RANGE

https://virginiacyberrange.org/

Courseware Repository

Courses, modules, and exercises for use in Virginia high school, community college, and university cybersecurity curricula

Exercise Area

Isolated network environments where students can safely complete hands-on cybersecurity exercises and competitions

Community of Purpose

Encouraging a community of cybersecurity educators to share best practices and improve cyber education in Virginia

- 85 Virginia Cyber Range courses supported this year
  - 55 courses at 40 Virginia high schools
  - 17 courses at 6 community colleges
  - 13 courses at 7 universities
- Over 500 student and instructor accounts
- Executive committee partners: Virginia NSA Centers of Academic Excellence in Cybersecurity Education
  - Danville CC
  - George Mason University
  - James Madison University
  - Longwood University
  - Lord Fairfax CC
  - Norfolk State
  - Northern Virginia CC
  - Radford University
  - Thomas Nelson CC
  - Tidewater CC

Teaching and Learning

Enabling Diverse Models for Teaching and Learning

Models

- Fully online courses – asynchronous
  - Example: Master of Information Technology
- Fully online courses – synchronous
  - Example: Commonwealth Graduate Engineering Program (CGEP)
  - Example: School of Public and International Affairs (SPIA) graduate program
- Hybrid courses/flipped classrooms
  - Example: Biology courses
  - Example: Multiple Winter Session courses
- Technology-mediated learning
  - Example: Math Emporium
- Technology-assisted learning using lecture capture
  - Example: College of Veterinary Medicine

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Teaching and Learning

Enabling New Models for Teaching and Learning

Capabilities – Focus on people and ideas

- Enabling innovation in teaching and learning
  - Innovation/Outreach Studio
  - “Sandbox” grants
  - Innovation in Learning grants
- Enabling course re/design and credentialing faculty for SACS
  - Learning Experience Design services
  - Design and Develop Awards
  - 4-VA grant initiatives
- Promulgating best practices
  - Networked Learning Initiative classes, workshops, and seminars

NLI (2016-2017)
1,405 unique participants
13,884 credits earned

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Enabling New Models for Teaching and Learning

Capabilities – Focus on technology

- Example technologies
  - Learning management system: Canvas
  - Lecture capture: Kaltura (was Echo 360)
  - Video content management: Kaltura (was Echo 360)
  - Videoconferencing: Zoom (was WebEx)
  - Connected classrooms

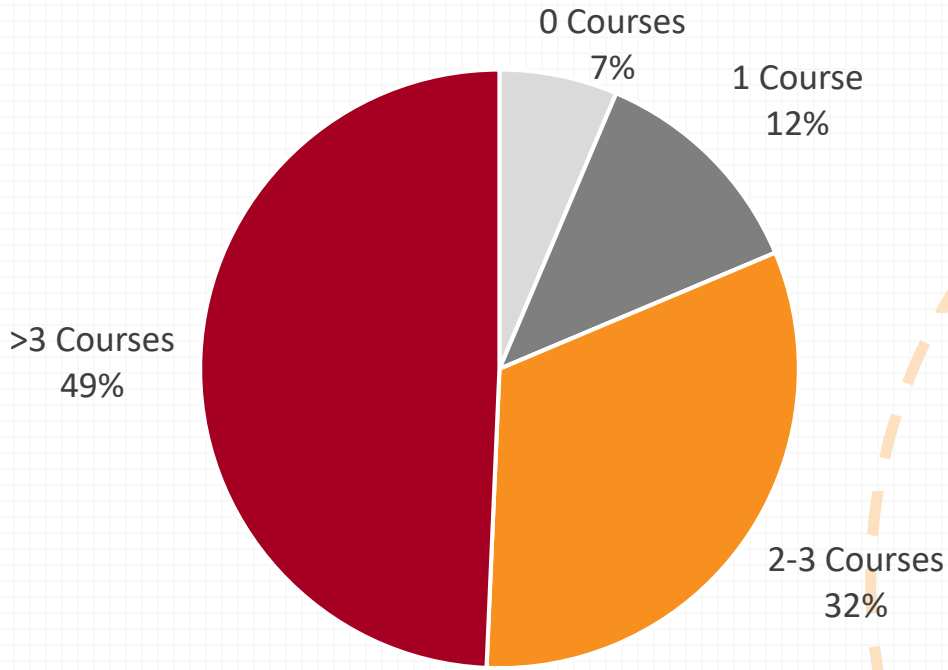
Teaching and Learning

Enabling New Models for Teaching and Learning

93% of our graduating students have taken at least one online class

66% of our graduating students have taken at least one technology-assisted course

Online Courses Taken by Graduating Undergraduates, 2017-2018
(Preliminary Data)



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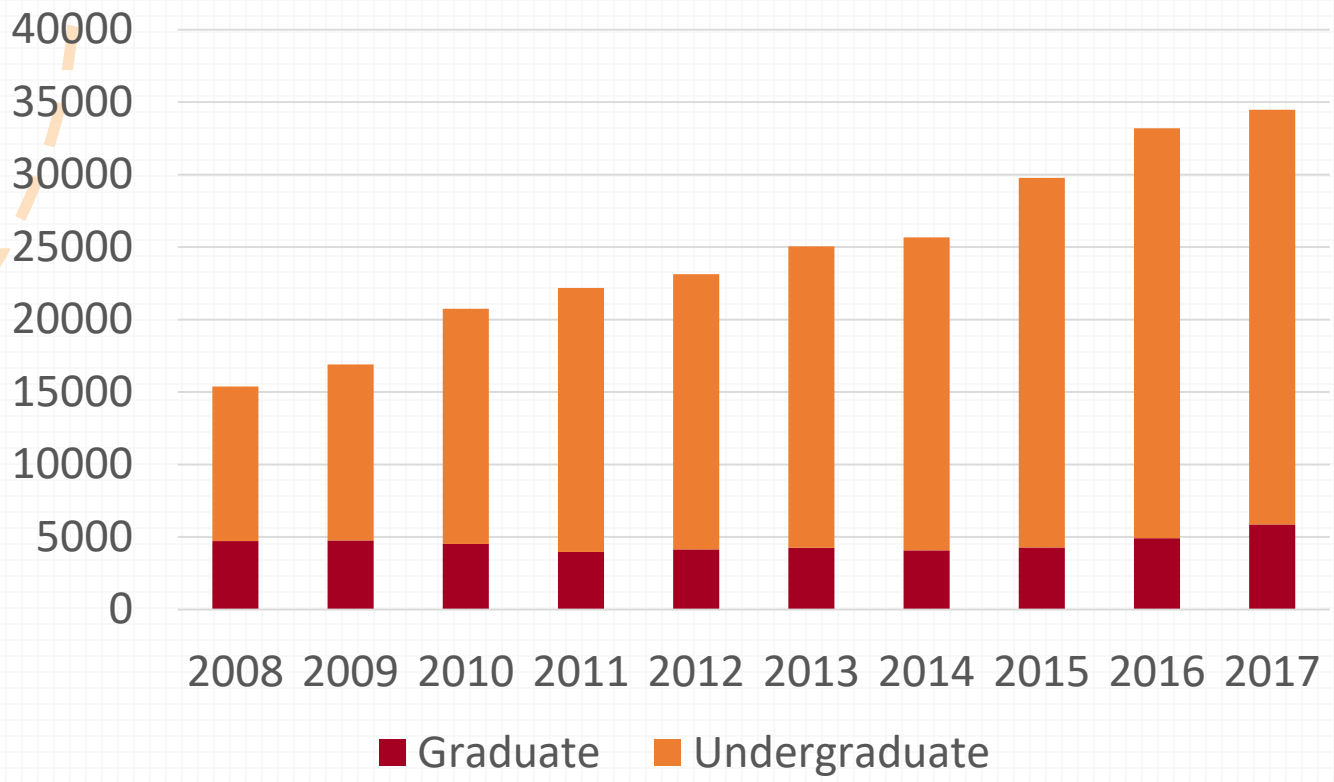
Enabling New Models for Teaching and Learning

Enrollments in Online Course Sections, 2008-2017



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Research

Selected Recent Accomplishments

- Enabling access to advanced research computing
  - Shared high-performance computing (HPC) systems
  - Addressing needs of multiple research domains
- Enabling data and IT security compliance for researchers
  - Secure research environment
- Meeting growing demands for network capacity
  - 100-gigabit per second connection to national research networks
  - 10-gigabit per second VT-Research Network for on-campus connections
- Meeting growing demands for storage
  - VT-Archive
  - Parallel file systems

Research Computing

Access to Advanced Research Computing

- Open access to high-performance computing systems and storage
  - BlueRidge
  - NewRiver
  - DragonsTooth
  - Cascades
  - Huckleberry
- Investment Computing Program
  - Joint investment for priority access for participating researchers

Huckleberry cluster for deep machine learning

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Research Computing

Access to Advanced Research Computing

System	Production	Nodes	Cores	GPUs	Research Domains
BlueRidge[1]	2013	408	3,264	260	General HPC workloads
NewRiver	2015	134	3,288	94	Diverse workloads
Cascades	2016	196	6,352	8	Diverse workloads
DragonsTooth	2016	48	1,152		General HPC workloads
NewRiver Addition	2017	39	1,092	78	Deep learning and GPU-based computations
Huckleberry[2]	2018	14	224	56	Deep learning
Cascades Addition	2018	40	960	80	Deep learning and GPU-based computations
TOTALS[3]		**879**	**16,332**	**576**	

Notes:
1. BlueRidge contains Intel MIC cards rather than GPUs.
2. Huckleberry's Power8 processors support additional parallelism using hardware threads.
3. Not all core are equivalent, but this provides rough notion of system capabilities.

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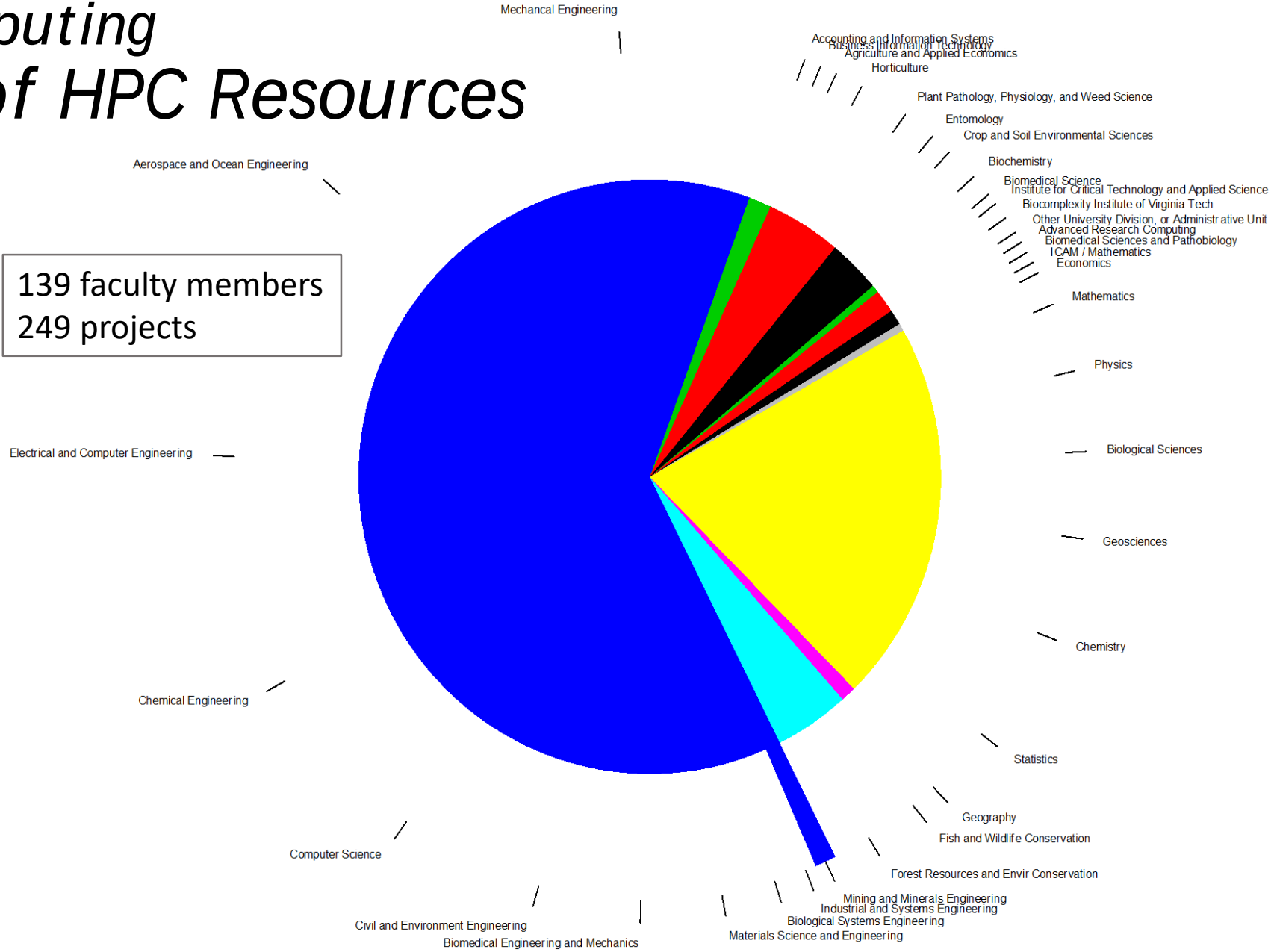
Research Computing
Broad Use of HPC Resources

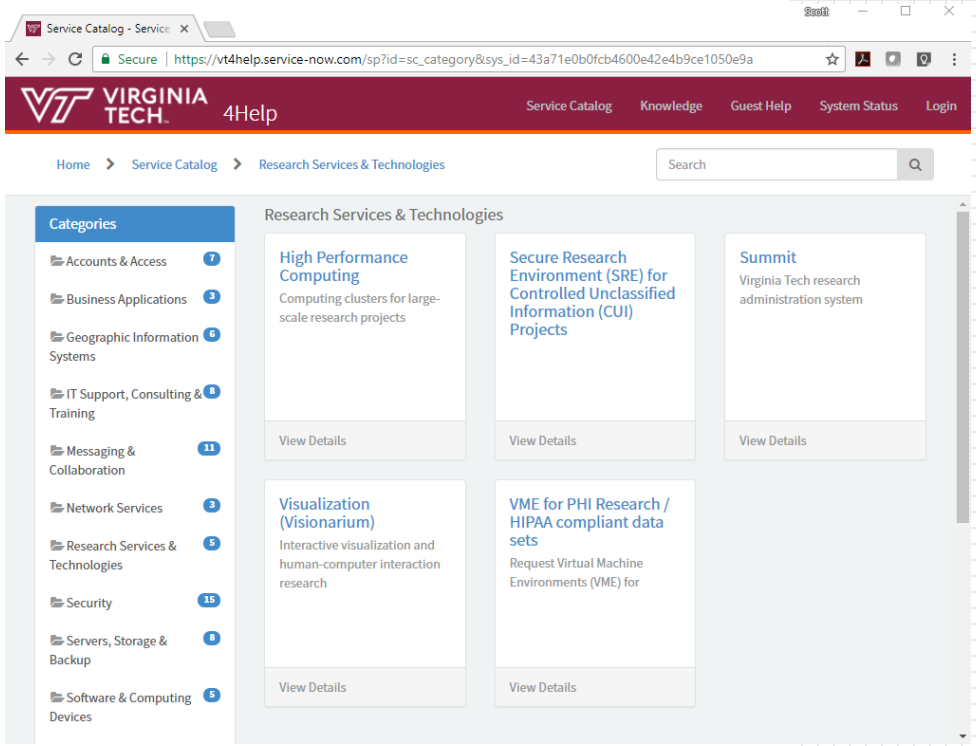
College of Engineering	**0.63**
College of Science	**0.21**
College of Agriculture and Life Sciences	**0.04**
College of Natural Resources	**0.04**
Agriculture & Life Sciences-College	**0.03**
College of Business	**0.01**
College of Natural resources	**0.01**
Information Technology	**0.01**
VT Research Institutes	**0.01**
College of Veterinary Medicine	**>0.01**
Virginia Tech Carilion Research Institute	**>0.01**

139 faculty members
249 projects



Research
Data and IT Security Compliance

- Security and compliance are increasingly important for all of our data, but research data is on the front edge of demands
  - HIPAA/PHI
  - ITAR
  - CUI
- Research and Innovation and the Division of IT are collaborating to address the full scope of compliance needs for data associated with sponsored programs and non-sponsored research
- Division of IT services
  - Security and data compliance consultation
  - Security reviews
  - Compliant environments as solutions



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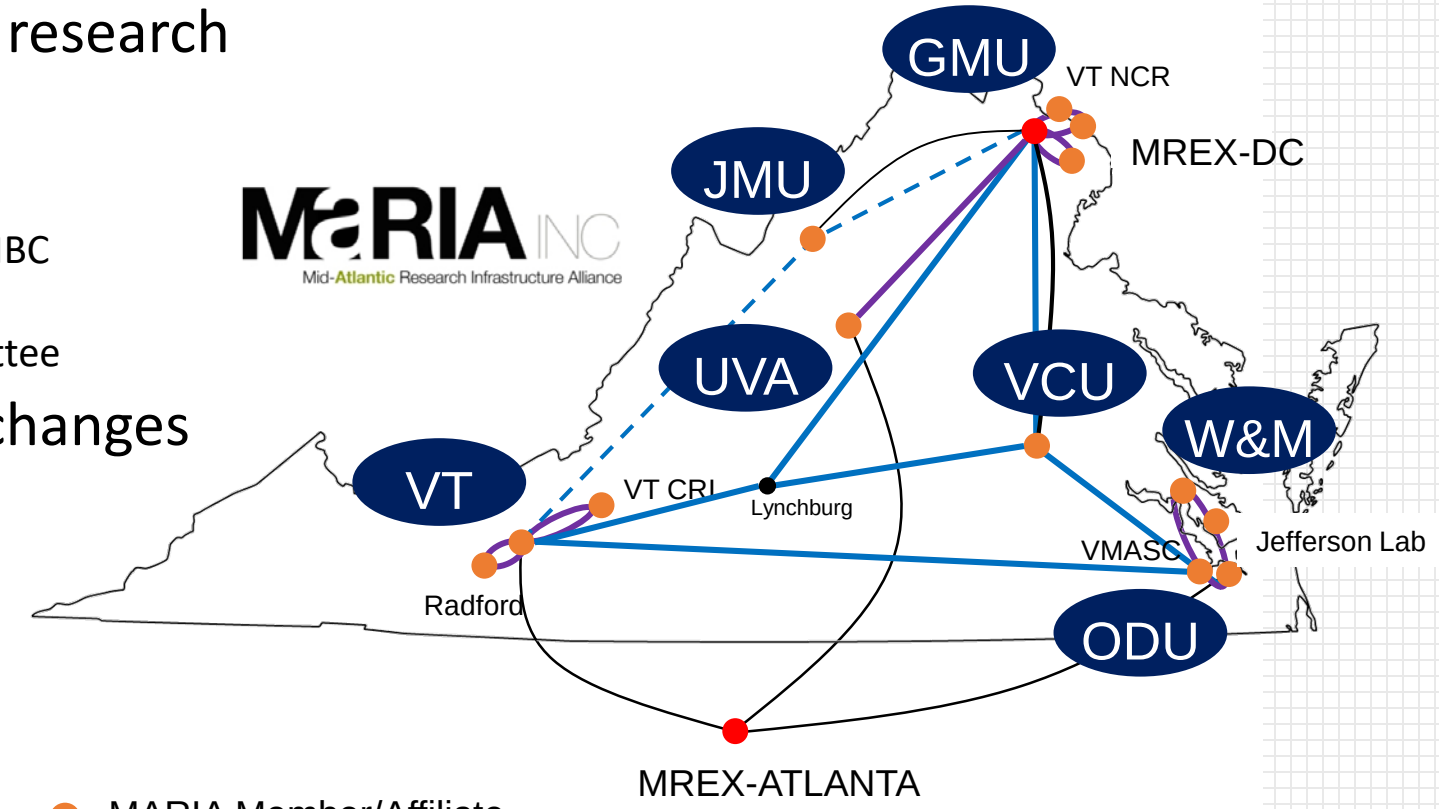
Research

Mid-Atlantic Research Infrastructure Alliance (MARIA)

- Virginia universities collaborate for competitive advantages for research
- Shared cyberinfrastructure resources and expertise
  - Statewide network partnership with MBC
  - Private optical networks
  - Research Computing Technical Committee
- Research and Education Exchanges in DC and Atlanta
  - Access to Internet2, national and international research networks
  - Direct peering with content and cloud service providers
  - Low-cost commodity services



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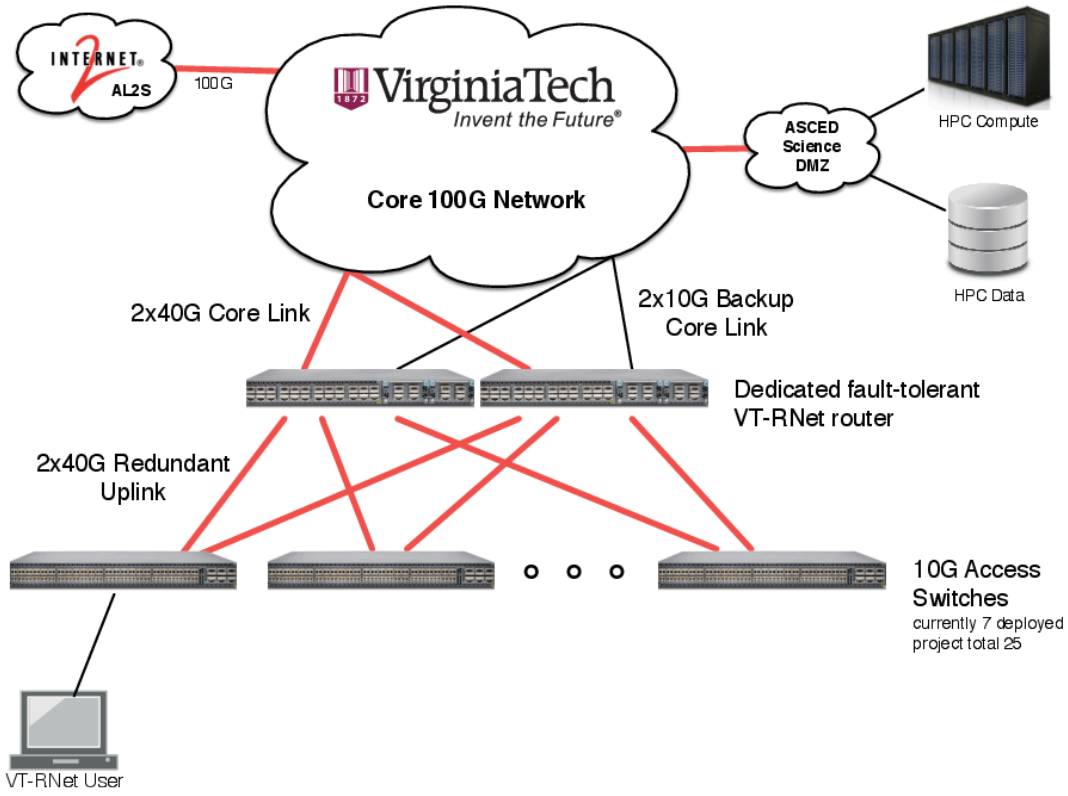
Research

VT-RNet: High Data-Rate Research Network

- VT-RNet provides 10-Gbps network connections to dramatically reduce times for large data transfers
- 21 connections in 10 buildings to date
- Request for proposal process used to select locations
- Funded through an NSF grant (Award 1541338) plus Division of IT



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Operations and Administration

Selected Recent Accomplishments

- Seeking to enable operational effectiveness
  - Increasing operational effectiveness within IT services
  - Leveraging IT for to provide broader benefits to the university's operational effectiveness
- Transition to Banner 9
  - New underlying technology to improve integration and maintenance
  - Improved user experience
- Blackbaud implementation for Advancement
- Summit research administration system
- Simplifying finding and accessing services
- Service partnerships
- Meeting the demands for connectivity

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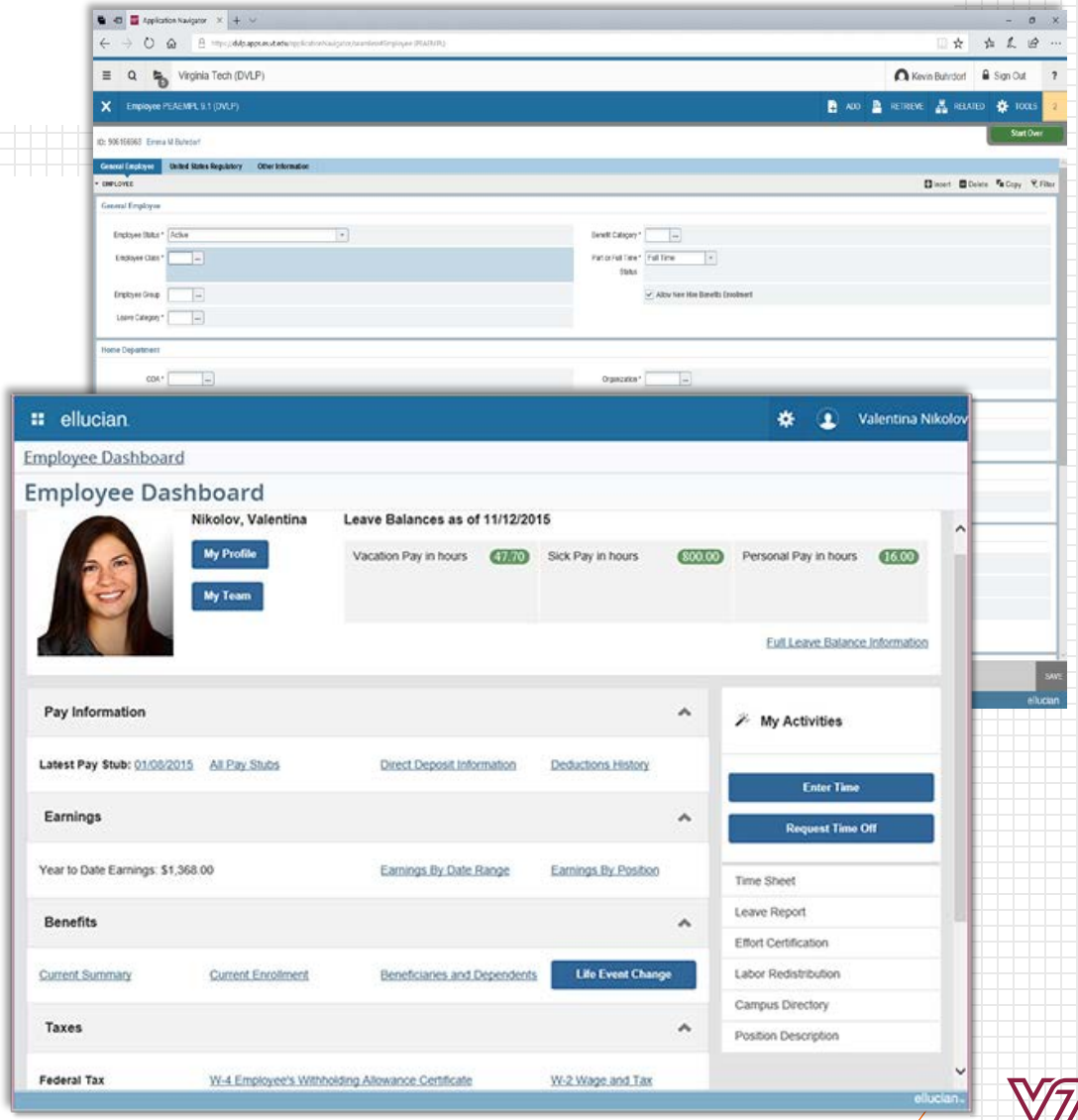
Operations and Administration

Transition to Banner 9

- ES working closely with functional partners
- Banner 9, Phase 1
  - Administrative pages
  - To be completed by end of CY 2018
- Banner 9, Phase 2
  - Web applications
  - Three-year project
  - Opportunity to better manage and meet growing set of enterprise applications



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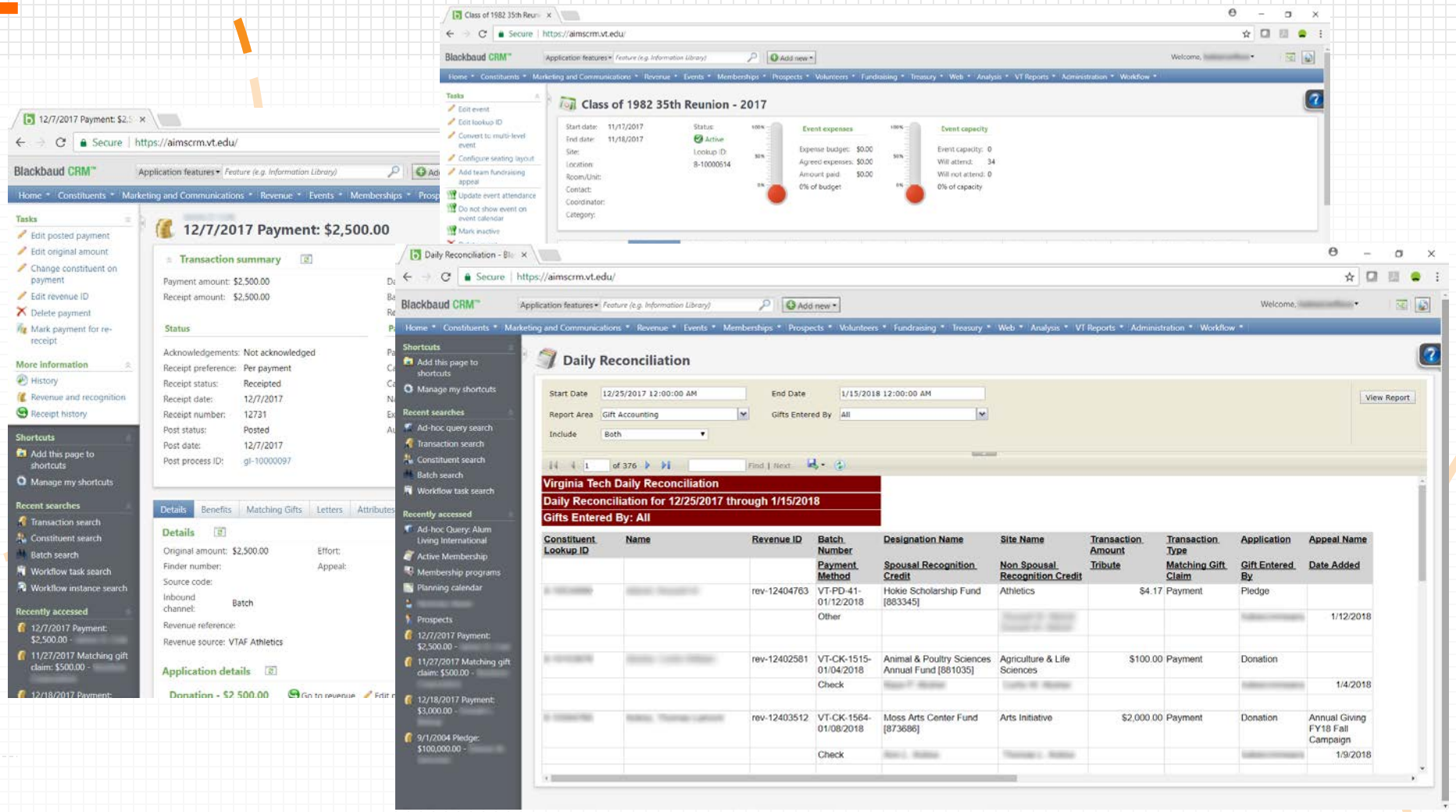
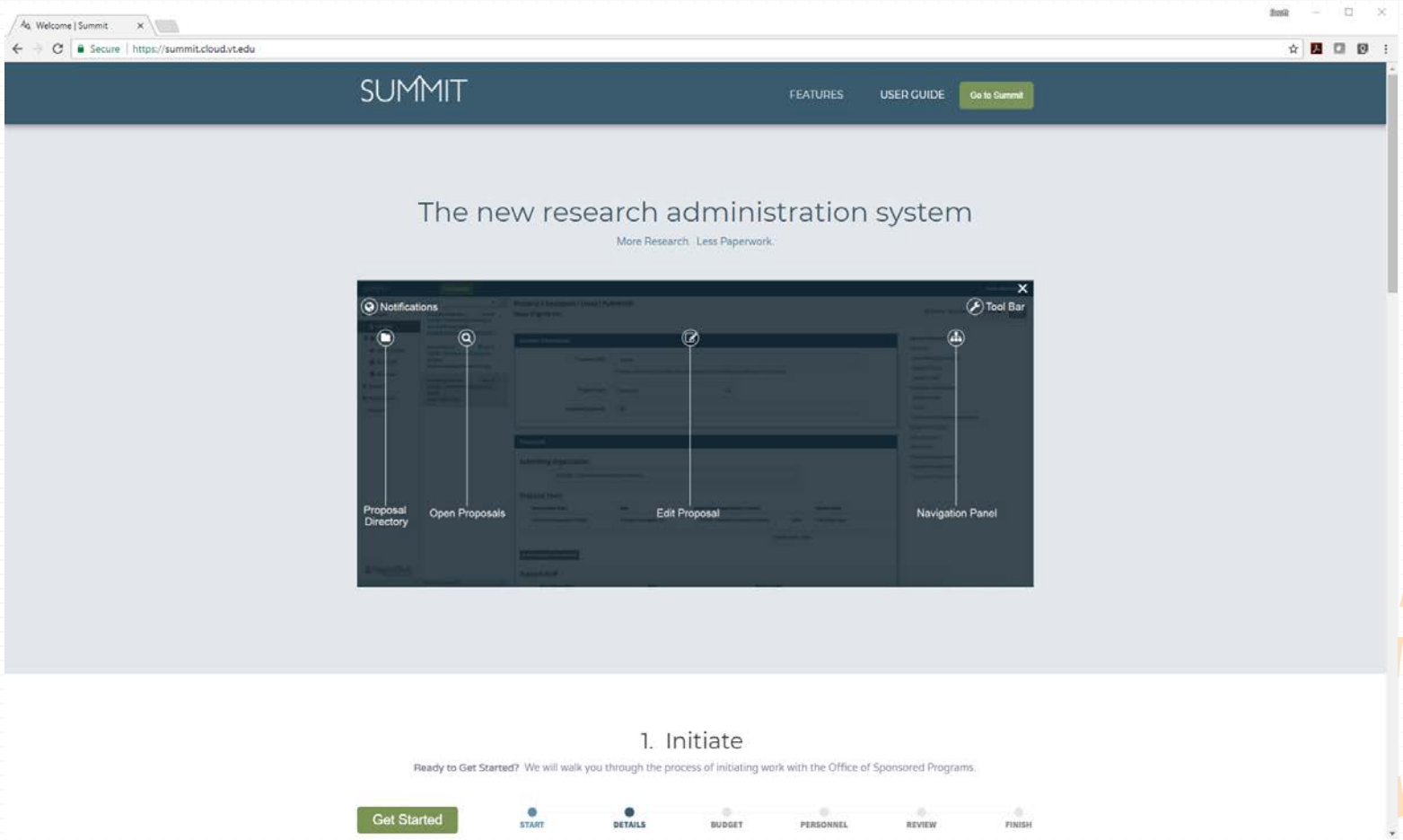
Operations and Administration

Blackbaud Deployment for Advancement



Operations and Administration

Summit Research Administration System



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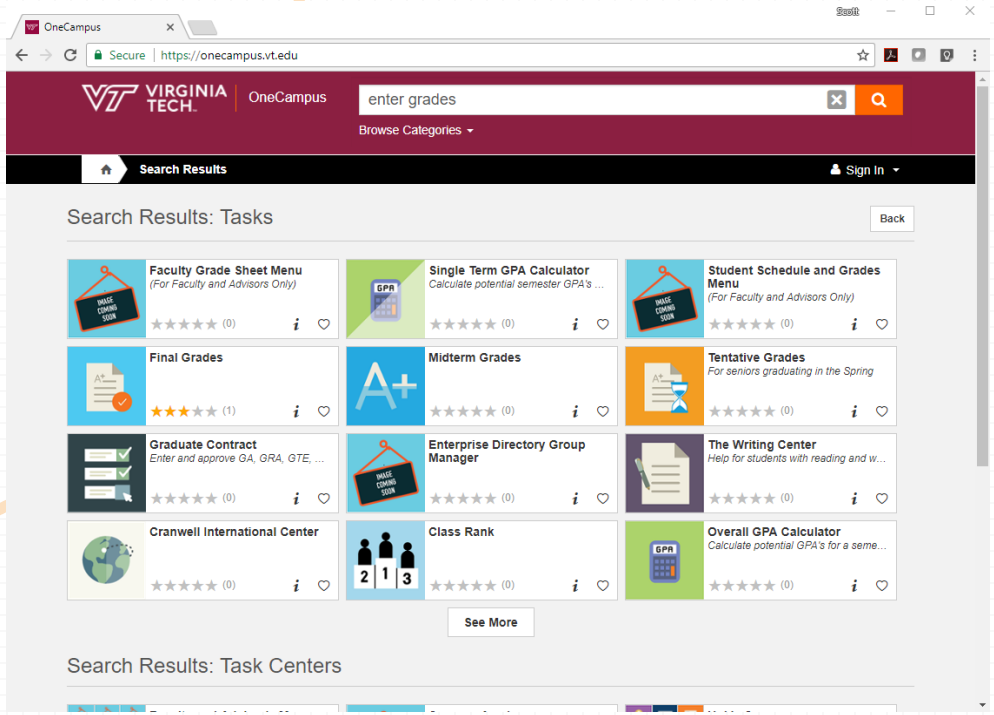
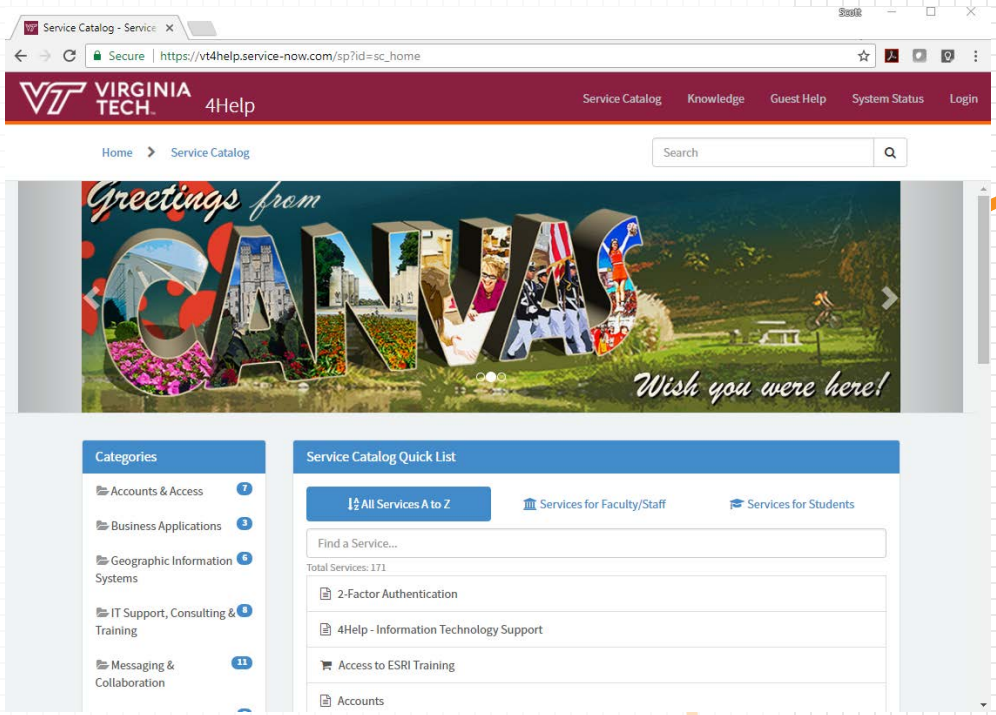
Operations and Administration

Making it easer to find and access services

OneCampus (onecampus.vt.edu)



Service Catalog (4help.vt.edu)



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Operations and Administration

Service Partnerships

- Service partnerships provide a more seamless support experience for users
- ServiceNow enables coordination between local IT support and enterprise (Division of IT) support
- Participants to date
  - President's Office (BAMS)
  - Provost's Office
  - Office of Assessment and Evaluation
  - Office of the Vice President for Research and Innovation
  - Graduate School
  - University Libraries
  - College of Agriculture and Life Sciences
  - College of Veterinary Medicine
  - Pamplin College of Business
  - VTC School of Medicine
  - Mining and Materials Engineering Department

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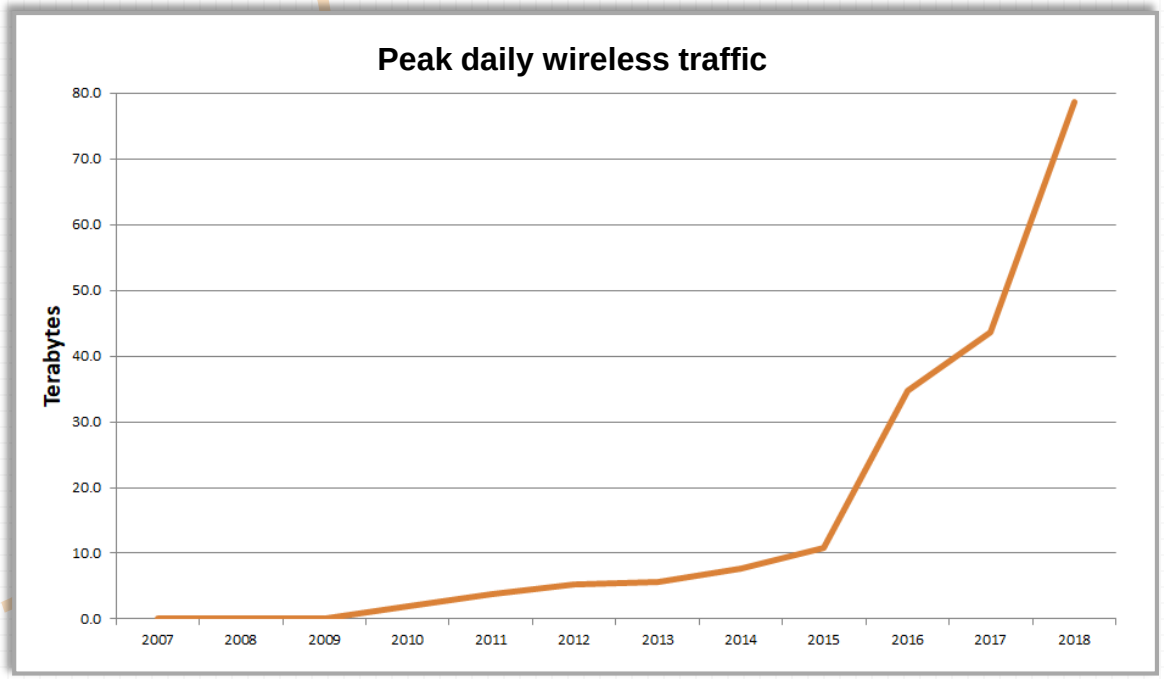
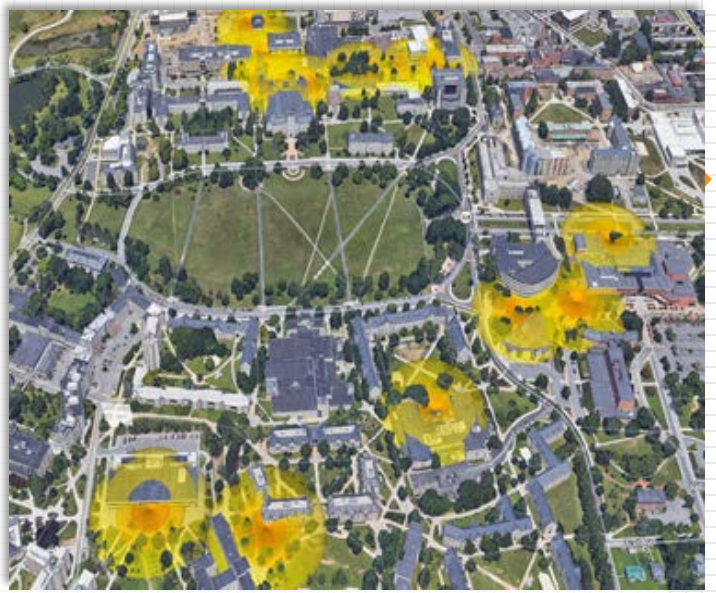
Operations and Administration

Meeting the Growing Demand for Wireless



	2004	2018	Change
# of academic bldgs with WiFi	104	184	+77%
# of AP's deployed in academic bldgs	929	4871	+424%
Avg SF coverage per AP	5682	1648	-70%



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Security
Selected Recent Accomplishments

- Two-factor authentication
- Account creation, securing Google applications
- Central logging service
- Network threat awareness

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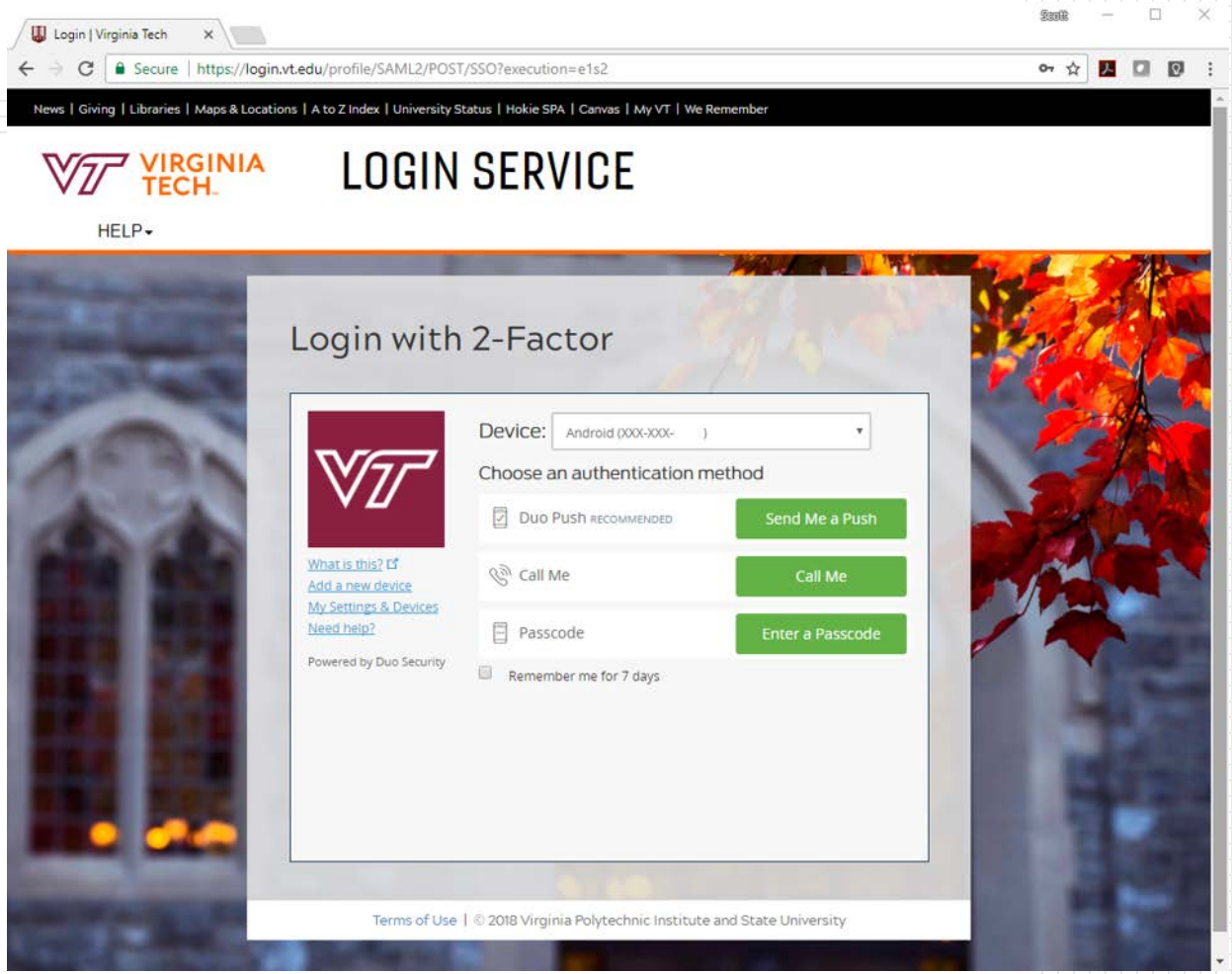
Security
Two-factor Authentication

- University-wide deployment
  - Employees
  - Students
  - Alumni and others where they use university services
- Reduction in compromised accounts
- Positioned for compliance



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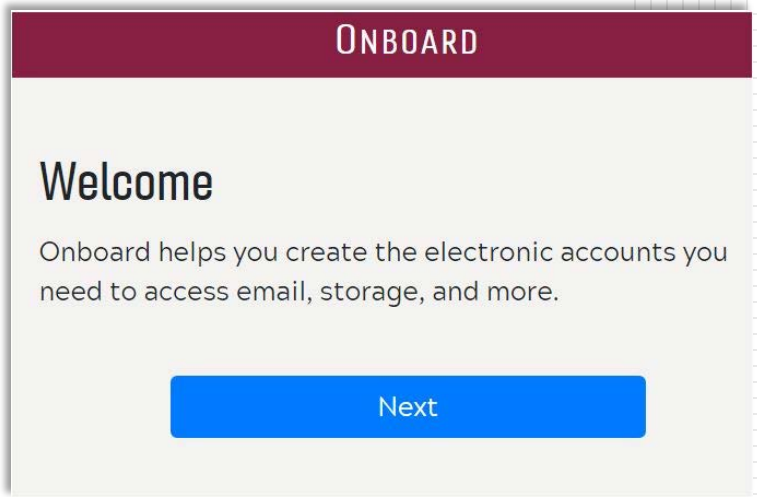
Security
Account Creation, Securing Google Applications

- Two major changes on January 29, 2018
  - Improved account creation process
  - Moving university Google applications (Google Suite) behind our single sign-on service and two-factor authentication
- Significant improvements in security and usability
- Significant change for many users
- Collaborative effort



Security

Central Logging Service

- Function
  - Ingest logging data from network devices, servers, and applications from across the university
  - Store data for operational and forensic analysis
  - Provide monitoring and analysis tools
- Scale [Fall 2017 data – Update needed]
  - 3,804 sources
  - 20 different log types
  - 550 gigabytes of data for 750 million events per peak day

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Security

Network Threat Awareness

- Re-architecting network threat monitoring infrastructure
- Better support for distributed locations: Blacksburg, NVC, VTRC-A, and VTC
- Increased global awareness
- Reduction in recurring costs with return on investment in just over one year

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Key Takeaways

Key Takeaways – 1

- The mission and goals of the Division of IT are to support and enable the mission and goals of the University
  - Teaching and learning
  - Research and innovation
  - Administrative and operational effectiveness
  - Differentiation and competitive advantage

Key Takeaways – 2

- Opportunities and challenges
  - IT is an enabler for innovation in learning, research competitiveness, and effectiveness – resulting in growing opportunities and demands
  - A key challenge is recruiting, retention, and technical and professional development of our workforce
  - Changes in technology and needs require changes in funding models – shifts from “buy” to “subscribe”

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Key Takeaways – 3

- Collaboration and coordination – within Virginia Tech and beyond – are key to:
  - Cost-effectively increasing capabilities, and
  - Meeting growing demands for IT services and systems

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June 3, 2018

Virginia Tech & Falcon

Partners: University Relations, Office Of Emergency Management, Virginia Tech Police, and Athletics

Social Media Management

- Currently we do not have a shared system for social media management across the university.
- We do not have a shared space to monitor analytics across all the university social media platforms.
- Units manually monitor and manage various social media in an uncoordinated manner.
- Falcon is a robust tool that will allow us to be collaborative, both proactively and reactively.

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Sharing good news

This tool will help with informing our community members about positive news and new university initiatives, such as:

- VT Alumni showing Ut Prosim around the world
- Major gift announcements
- Executive hiring announcements
- New living-learning communities and student scholarships

Currently, news and announcements are published on social channels using the separate currently available tools. We engage with our community members on those separate tools and have to aggregate the overall sentiment and reach of the news manually.

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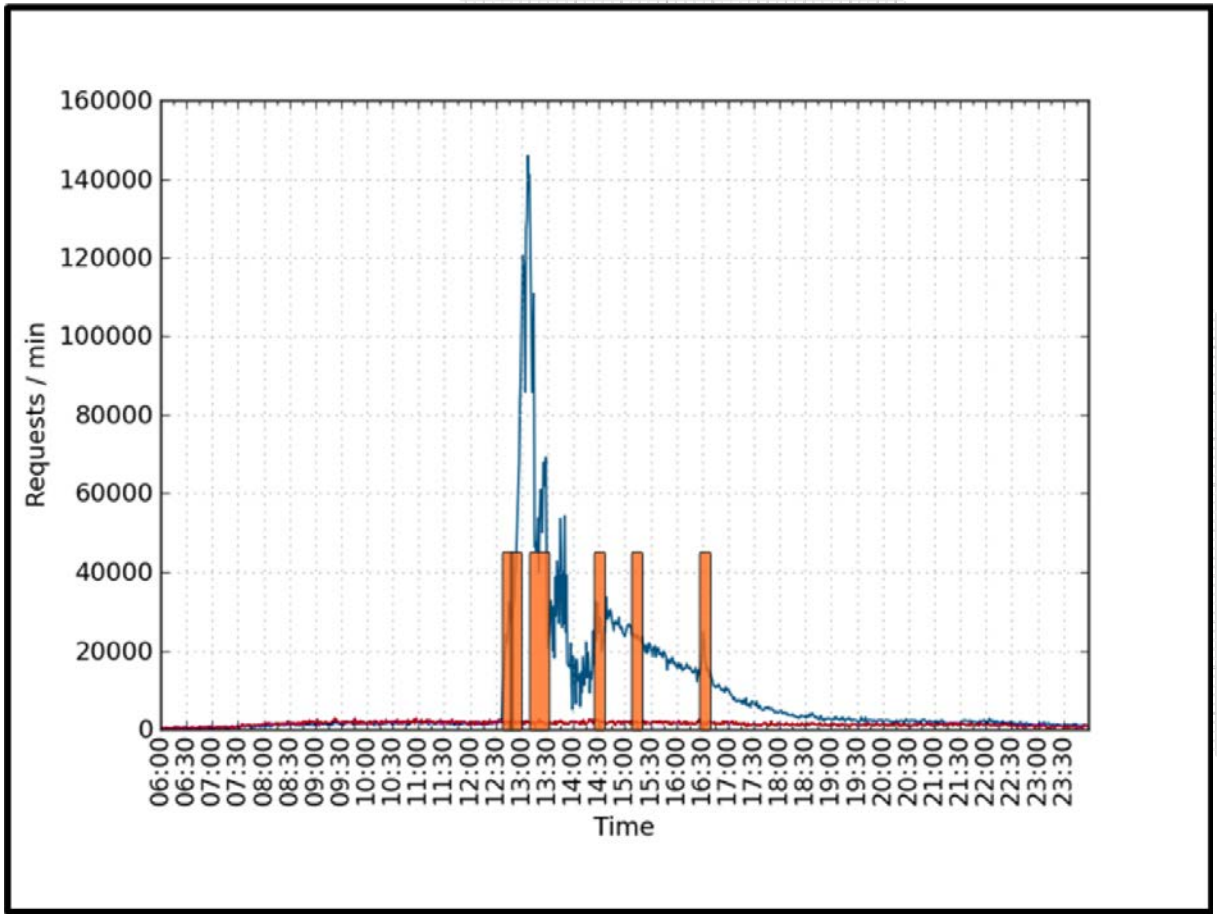
Case study from the Office of Emergency Management

vt.edu Website traffic



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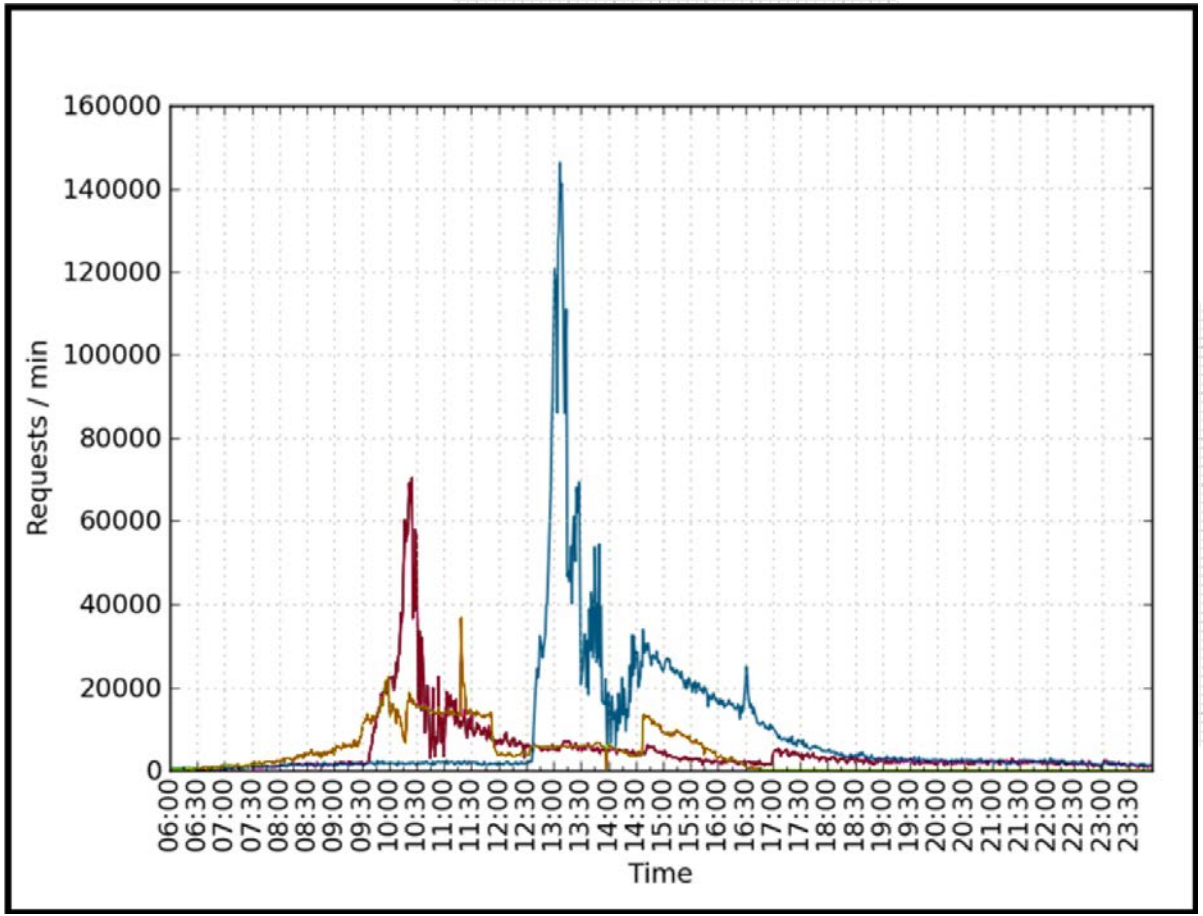

VTPD Basic Uses for Falcon

VTPD has not had any social media management tools.

Threat Assessment

- Enhance collaboration with University Relations regarding flagged social media posts of concern to public safety
- Minimize email communication and create more efficient work process

Engage

- Monitor specific posts
- Gather multi-platform information to see the social landscape
- Align communicate with other VT Falcon users for appropriate response

Publish

- Scheduled messaging and coordinated effort on safety posts and social media campaigns ahead of time
- Measure and assess effectiveness of posts

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Key Takeaways

- Having a comprehensive social media management tool allows for more efficient and effective work to be done to enhance and defend Virginia Tech's online reputation.
- More sophisticated social media monitoring tools can help police, emergency management, and public relations personnel to be more proactive on issues and crisis management.
- The insights and analytics gained from a comprehensive tool will allow for better data-driven decision making across many areas of the university.

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ATHLETICS

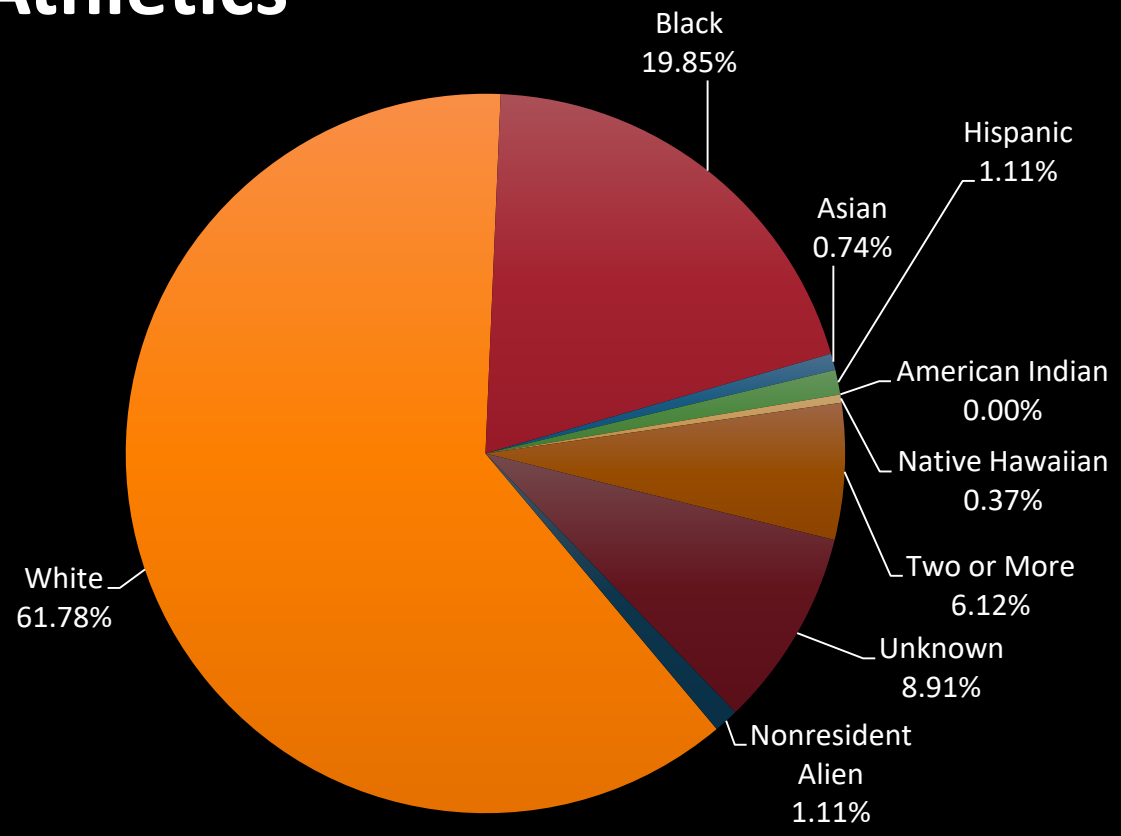
Intercollegiate Athletics report to the Governance & Administration Committee of the Board of Visitors

June 3-4, 2018

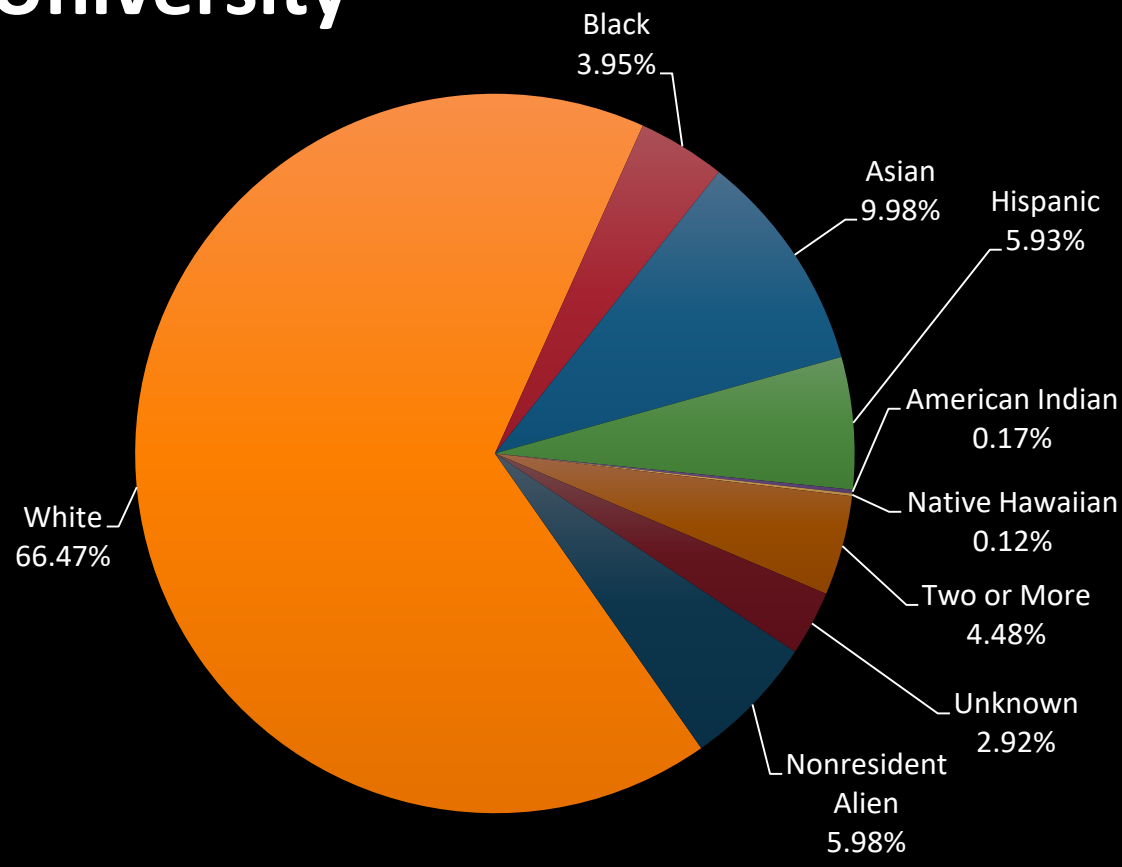
2016-17

539 Total Student-Athletes

Athletics



University

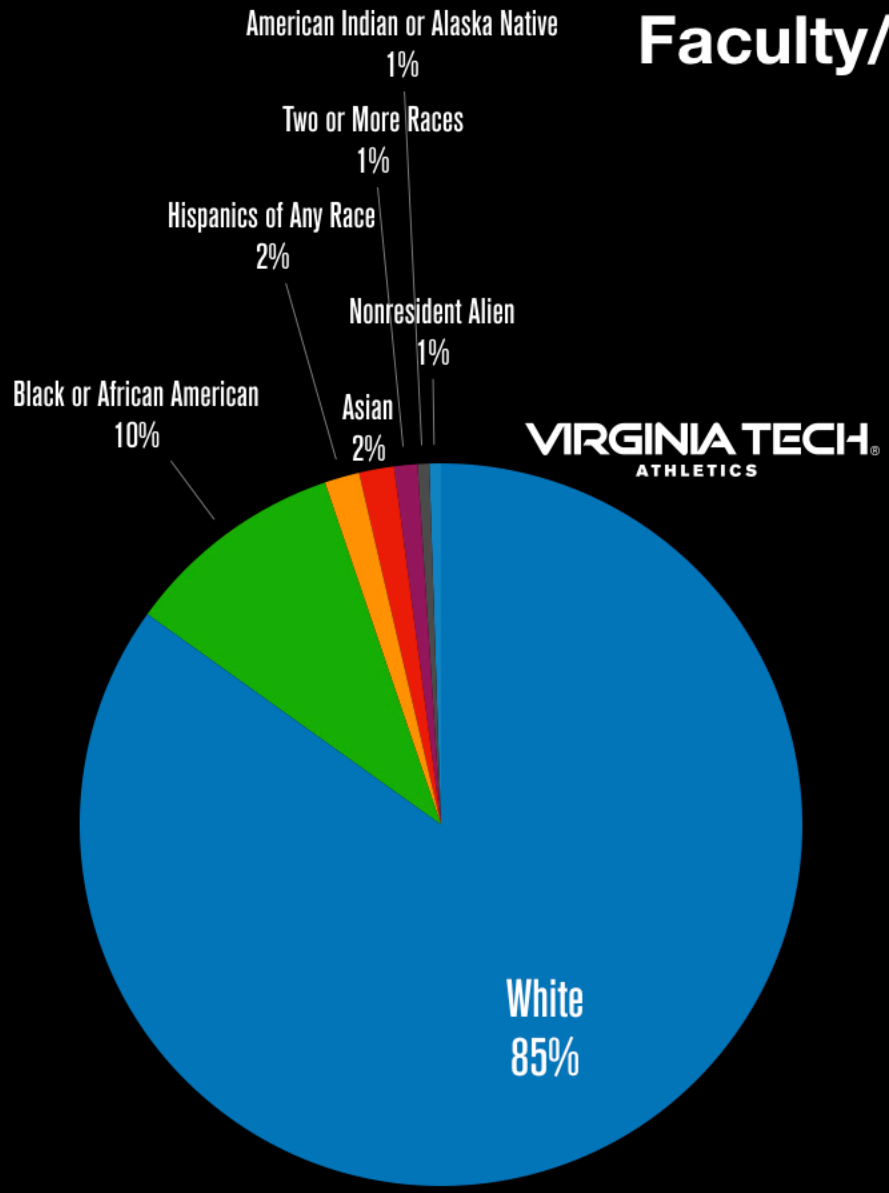


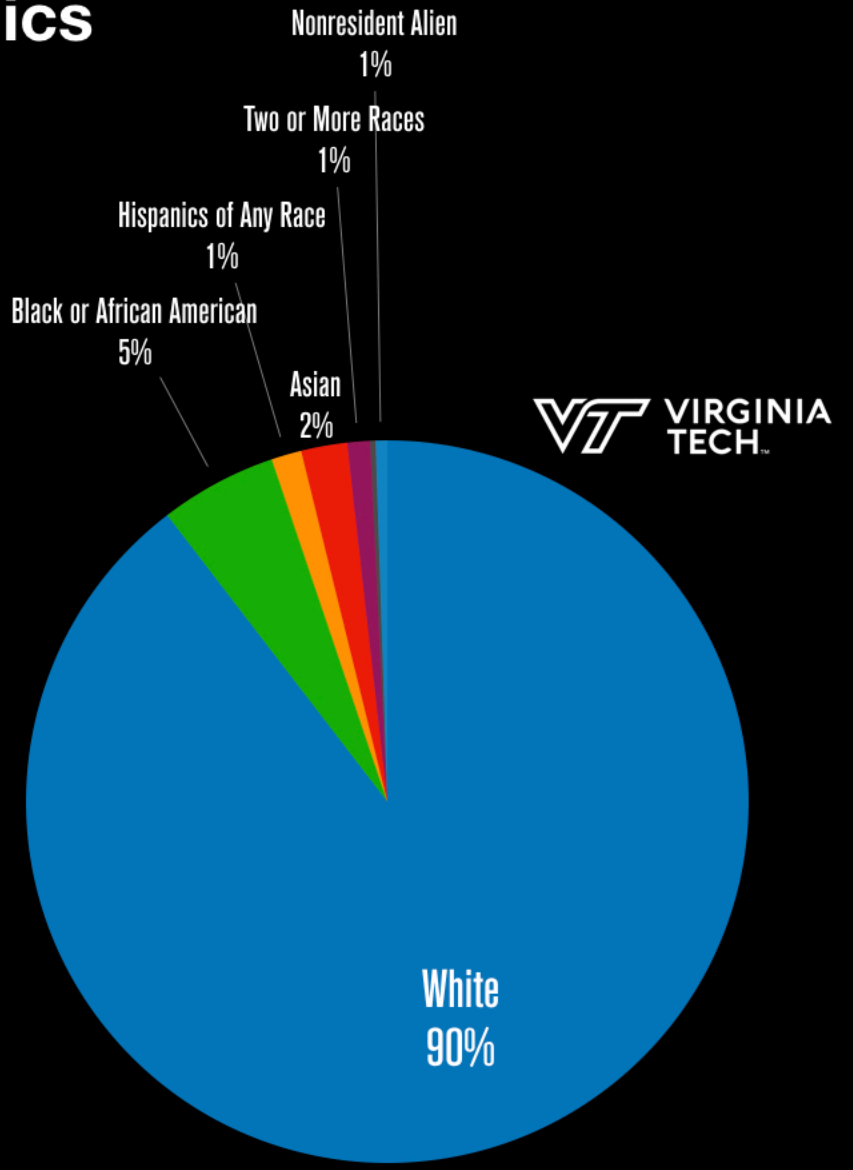
Student-Athlete Demographic Summary

	2012-13	2013-14	2014-15	2015-16	2016-17
White	61.33%	59.49%	61.57%	61.59%	61.78%
Black	16.76%	18.61%	19.03%	18.12%	19.85%
Asian	0.92%	0.55%	0.75%	0.91%	0.74%
Hispanic	0.18%	0.36%	0.19%	1.45%	1.11%
American Indian	0.18%	0.18%	0.19%	0.18%	0.00%
Native Hawaiian	0.00%	0.18%	0.37%	0.36%	0.37%
Two or More	3.13%	3.28%	4.10%	4.53%	6.12%
Unknown	9.58%	16.97%	13.81%	11.23%	8.91%
Nonresident Alien	7.92%	0.36%	0.00%	1.63%	1.11%

2016-17

Faculty/Staff Demographics





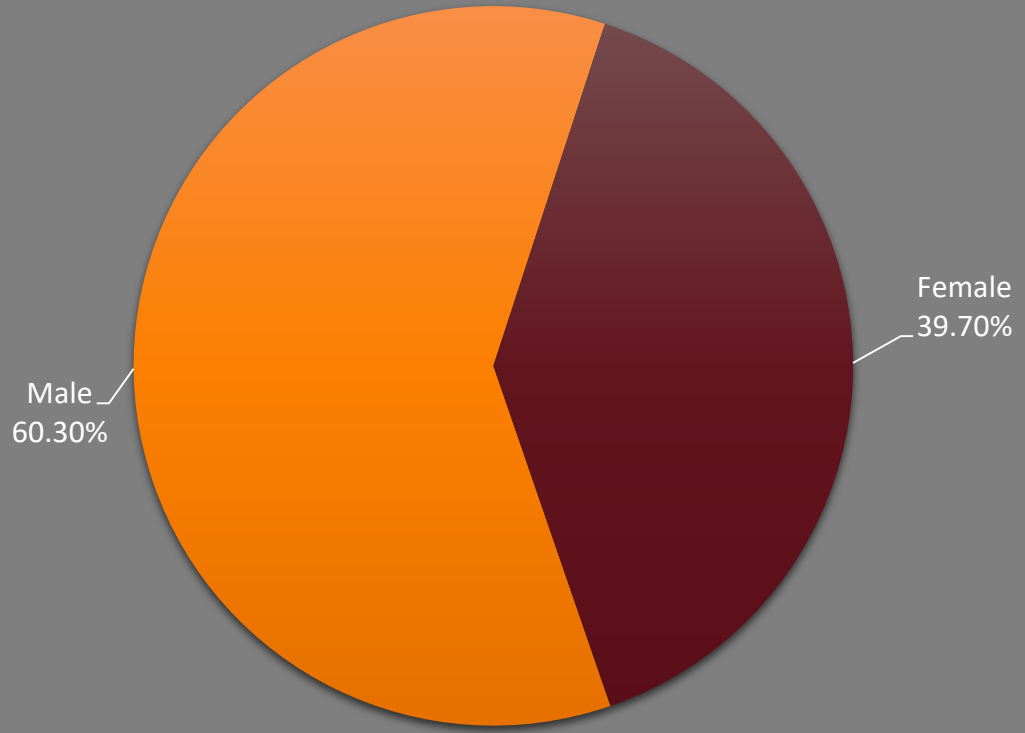
Athletics Demographic Summary

	2013	2014	2015	2016	2017
White	88.89%	86.96%	85.47%	84.90%	83.33%
Black or African American	8.19%	9.24%	10.61%	9.90%	12.22%
Hispanic of Any Race	1.17%	1.63%	1.68%	1.56%	1.67%
Asian	0.58%	0.54%	1.12%	1.56%	1.11%
Two or More Races	0.00%	0.00%	0.00%	1.04%	0.56%
American Indian or Alaska Native	0.58%	0.54%	0.56%	0.52%	0.56%
Nonresident Alien	0.58%	1.09%	0.56%	0.52%	0.56%

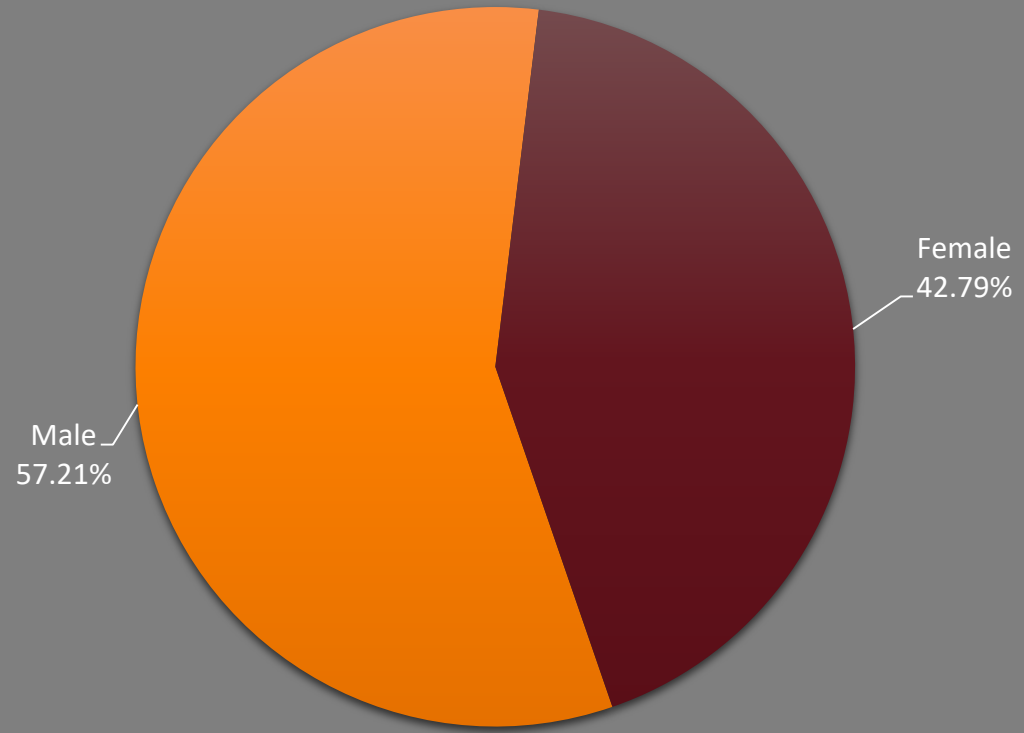
2016-17

Student-Athlete Demographics

Athletics



University



Student-Athlete Demographic Summary

	2012-13	2013-14	2014-15	2015-16	2016-17
	60.41%	62.77%	62.31%	61.41%	60.30%
	39.59%	37.23%	37.69%	38.59%	39.70%

Head Coach Hires
2012 - Present

Lopez Miro (Swimming)
Sung (Lacrosse)
Wilson (Volleyball)
Brooks (Women's Basketball)
Fuente (Football)
Robertson (Women's Golf)
Szefc (Baseball)
Robie (Wrestling)
Williams (Men's Basketball)
Mason (Baseball)

HIRING PRACTICES: JULY 1, 2017 TO APRIL, 2018 TWENTY-THREE PERCENT OF THE HIRES BELOW ARE FROM UNDER REPRESENTED GROUPS

- Senior Director, Business and Fiscal Operations
- Senior Associate AD, External Operations and Engagement
- Assistant Coach, Baseball
- Assistant Coach Baseball
- Director, Operations, Baseball
- Head Coach, Baseball
- Director, Sports Medicine
- Director, Sports Medicine
- Assistant Coach, Track/Field/Cross Country
- Director, Student-Athlete Development
- Senior Associate AD, Internal Operations
- Assistant Director, S/C Football
- Assistant Head Coach/Executive Director, Player Development Football
- Director, Player Development, Football
- Director, On-Campus Recruiting, Football
- Head Coach/Director, M/W Swimming/Diving Program
- Director, Equipment Services, Football

DIVERSITY & INCLUSION INITIATIVES:

- Study Abroad Course – established 2011 (Dominican Republic, Switzerland, Rwanda 2017 & 2018)
- Athletics Diversity and Inclusion Committee established -Spring 2017
- Men's Basketball trip to National Museum of AA History -Summer 2017
- Dr. Menah Pratt-Clarke spoke with Student-Athlete Advisory Committee (10/9/17), men's basketball (11/1/17), women's tennis (11/9/17)
- Collaboration with Black Male Excellence Network (BMEN) and Multicultural Academic Opportunities Program (MAOP)
- Promoting #supportwomenssports in collaboration with Dr. Menah Pratt-Clarke – Spring 2018
- Diversity Newsletter established Feb 2018 – Department-wide resource which provides information and educational opportunities related to inclusion and diversity.
- Financial contribution and participation in the Virginia Tech Uplifting Black Men Conference – February 2018
- Collaboration/sponsorship for Understanding Barriers to Reaching Underserved Populations: Best Practices for Gender-Based Violence Prevention- Feb 2018
- Staff and student-athlete Title IX trainings
- Diversity education at department senior staff meeting (3 meetings - February and March 2018)

DIVERSITY & INCLUSION INITIATIVES:

- Safe Zone Training by various staff (Compliance and Student-Athlete Development)
- Staff participation in Diversity Ally Course through UOPD
- Orientation and onboarding for freshmen and transfer student-athletes
- Representation on SVPC – Sexual Violence Prevention Council
- Title IX Trainings
  - Kelly Oaks @ all department meeting 8.29.17
  - Head Coaches 1.16.18
- Title/VAWA – athletics and university onboarding requirement for all new employees
- Diversity education by Yolanda Avent, Senior Director of Cultural Community Centers and Lacrosse Team 4.6.18
- S.M.A.R.T. – Sexual Misconduct and Relationship Violence Training which discusses issues surrounding alcohol, consent, bystander intervention, retaliation and campus resources.
- One Love – Workshop illustrating the signs and effects of relationship abuse, followed by honest and empowering discussions.

3 KEY POINTS TO TAKE AWAY:

1. We are one of the most diverse units or groups on campus and our Student-Athletes' enhance the entire student body population.
2. We are recruiting in non-traditional high schools in the state of Virginia that Virginia Tech wants more exposure in and access to.
3. We will continue to strive to have staff reflective of our student-athlete demographics/population, thereby making our Department even more dynamic, creative and responsive.

VIRGINIA TECH®
ATHLETICS

Closing Remarks

Q & A

Pratt Funds Overview

ACADEMIC, RESEARCH, AND STUDENT AFFAIRS COMMITTEE AND FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 20, 2018

In 1975, the university received a significant bequest from the estate of Mr. John Lee Pratt of Stafford County, following his death on December 20, 1975. The bequest was divided equally into two distinct parts, one to support Animal Nutrition and one to support the College of Engineering. According to the will, the bequest for Animal Nutrition was to be used to promote the study of animal nutrition by supplementing salaries, providing equipment and materials to be used for experiments in feeding and in the preparation of feeds for livestock and poultry, and publishing and disseminating the research results of the studies. The will provided that the bequest for the College of Engineering should be used to support research and scholarships.

Distributions of the Pratt Estate were received in several installments: $9,561,819 in 1976, $1,330,000 in 1977, $47,000 in 1979, and $30,164 in 1981, for a total of $10,968,983. The Pratt endowment has grown to $47.5 million as of March 31, 2018. The following paragraphs summarize some of the major accomplishments of the College of Engineering and the Animal Nutrition Programs that are directly tied to the funding provided by the Pratt estate.

When the Pratt Endowment was originally established, the College of Engineering was in the early stages of becoming a nationally recognized leader in engineering education and research. The Pratt Endowment has played a significant role in allowing the College to enrich its pool of students, to offer additional international study opportunities to students, and to provide increased support for its research.

Income from the Pratt Endowment provides an unusual opportunity to support an animal nutrition program of high quality. Use of these Endowment earnings have concentrated on enhancing research and educational opportunities beyond what departments could do with state and federal funding. The main funding strategy remains with strong support for Ph.D. training, direct research support, scientific equipment, and visiting professors that stimulate and inspire the faculty and students engaged in nutrition research.

2018-2019 PRATT FUND BUDGET PROPOSAL

Pursuant to the spending policy adopted for the Pratt Estate Fund, it is anticipated that additional income of $1,969,166 will be available for expenditure in FY 2018-2019. Targets of $999,333 and $969,833 were given respectively to the College of Engineering and to the Animal Nutrition Programs.

College of Engineering

Source of Funds:	
Endowment Income	**$999,333**
Proposed Expenditures:	
Undergraduate Scholarships	$507,583
Undergraduate International Scholarships	60,000
Graduate International Scholarships	30,000
Graduate Tuition Scholarships	96,750
Graduate Research Fellowships	182,000
Graduate Recruitment for Research Programs	123,000
Total Proposed Expenditures	**$999,333**

Animal Nutrition

Source of Funds:	
Endowment Income	**$969,833**
Proposed Expenditures:	
Animal Nutrition Research and Scholarship	$969,833
Total Proposed Expenditures	**$969,833**

RECOMMENDATION:

That the proposed 2018-2019 allocation and use of Pratt Funds be approved.

June 4, 2018

RESOLUTION TO DISCONTINUE BACHELOR OF SCIENCE DEGREE IN ENVIRONMENTAL POLICY AND PLANNING

WHEREAS, the bachelor of science in environmental policy and planning was established in 1997; and

WHEREAS, the degree has been earned by 360 students over the past 20 years; and

WHEREAS, the administrative location of the undergraduate program is being moved within the College of Architecture and Urban Studies from the Urban Affairs and Planning program to the School of Public and International Affairs (SPIA); and

WHEREAS, the bachelor of arts in public and urban affairs (PUA) will be the only degree offered by SPIA; and

WHEREAS, a new environmental policy and planning major will be offered under the PUA degree; and

WHEREAS, a teach-out plan has been developed to ensure students currently enrolled in the bachelor of science may complete and be awarded the bachelor of science in environmental policy and planning; and

WHEREAS, spring 2018 will be the last semester for admitting students to the bachelor of science in environmental policy and planning; and

WHEREAS, current students in the bachelor of science in environmental policy and planning have been informed that the degree will be discontinued and they have until December 2021 to complete the degree requirements; and

WHEREAS, current students who plan to graduate in spring 2020 (or after) will have the option of transitioning to the new environmental policy and planning major under the PUA degree; now,

THEREFORE, BE IT RESOLVED, that the bachelor of science in environmental policy and planning be discontinued, effective fall 2021.

RECOMMENDATION:

That discontinuance of the bachelor of science in environmental policy and planning be approved effective fall 2021.

June 4, 2018

RESOLUTION TO ADOPT THE VIRGINIA TECH CARILION SCHOOL OF MEDICINE STUDENT HONOR CODE, ATTRIBUTES OF PROFESSIONALISM, AND TEACHER-LEARNER COMPACT

WHEREAS, Virginia Tech is acquiring and integrating the Virginia Tech Carilion School of Medicine (VTCSOM) effective July 1, 2018, and

WHEREAS, by statute, the Virginia Tech Board of Visitors is charged with regulating the government and discipline of students, and

WHEREAS, prior to integration, the VTCSOM as an independent school properly promulgated and instituted student honor and conduct policies and procedures; and

WHEREAS, the independent VTCSOM included its Honor Code, Attributes of Professionalism, and Teacher-Learner Compact documents in the review and subsequent accreditation by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) and the Liaison Committee on Medical Education (LCME); now

THEREFORE, BE IT RESOLVED, that the Virginia Tech Board of Visitors affirms that the policies and procedures outlined in the student *Hokie Handbook* including the Virginia Tech Student Code of Conduct apply to VTCSOM students, and

BE IT FURTHER RESOLVED, that the Virginia Tech Board of Visitors approves and adopts the VTCSOM Honor Code, Attributes of Professionalism, and Teacher-Learner Compact policies as attached (attachments A, B, C, and D); and

BE IT FURTHER RESOLVED, that the Board of Visitors directs the university's administration to reference or integrate, as appropriate, into university policies, handbooks, and procedures the VTCSOM Honor Code, Attributes of Professionalism, and Teacher-Learner Compact policies, and

BE IT FURTHER RESOLVED, that after July 1, 2018 revisions to the VTCSOM Honor Code, Attributes of Professionalism, and Teacher-Learner Compact will be submitted by the VTCSOM, in collaboration with the Division of Student Affairs and/or the Office of the Vice President and Dean for Graduate Education, for approval through appropriate university governance processes for final approval by the Board of Visitors.

RECOMMENDATION:

That the Board of Visitors approve to approve the resolution to adopt the VTCSOM Honor Code, Attributes of Professionalism, and Teacher-Learner Compact policies.

June 4, 2018

VTCSOM Honor Code

The Virginia Tech Carilion School of Medicine (VTCSOM) values the ability to trust the academic honesty and integrity of the students who matriculate through the curriculum and enter the field of medicine with a VTCSOM medical doctorate. It is imperative that students feel duty-bound to not only maintain allegiance to the VTCSOM Honor Code as individuals, but to expect the same Honor Code loyalty from the entire student body, faculty, and staff. Therefore, any individual who is not accountable to the Honor Code will be held responsible by students and administration alike.

Allegiance to the Honor Code requires students to pledge commitment to the following tenets:

- I will not cheat on any examination or assignment.
- I will not plagiarize any assignment.
- During exam reviews, I will not copy, record, or disseminate exam information.
- I will not create or report fictitious research data.
- I will not inappropriately access or use patient information, nor will I falsify patient documents.
- I will not condone, permit, or enable cheating or plagiarizing by other students.
- If I witness an Honor Code violation, I will report the violation to the Senior Dean for Student Affairs or other dean. I will then maintain confidentiality about the incident.
- If I learn of an Honor Code violation, I will maintain confidentiality regarding the details of the violation and thus not discuss it with other students, faculty, or staff. If I have concerns about what I heard, I will talk to the Senior Dean for Student Affairs.
- I will not harass any student who violates or reports an Honor Code violation.

I hereby attest that I have read, understand, and commit to uphold the Virginia Tech Carilion School of Medicine Honor Code.

Student Signature: _____ Date: _____

VTC | Virginia Tech Carilion School of Medicine

Attributes of Professionalism

An essential task in the professional development of a medical student is to gain an understanding of the fundamental principles of the medical profession and attributes of the medical professional and to commit to the integration of these principles and attributes into her/his professional identity.

VTCSOM endorses the following attributes of professionalism as guiding principles of medical education and as consistent with the stated mission of VTCSOM to "produce physician thought leaders through an educational experience grounded in inquiry, research, and discovery" who will be prepared to serve patients in the most capable and compassionate manner. The following attributes apply to the classroom, the research laboratory, and the clinical settings.

Commitment to Engaged Learning: acknowledges primary responsibility for successful completion of the degree; demonstrates commitment to her/his own professional competence; punctual; attends required classes, clinics, or other required events; seeks additional knowledge and skills; seeks feedback; willing to assist other learners.

Compassion: considerate; displays empathy; listens attentively and responds humanely to the needs of patients; treats patients and families with dignity.

Conscientiousness: takes initiative; is flexible; delegates effectively; accepts personal responsibility for mistakes; asks for help when needed; maintains accurate information in patient records; discloses medical error when appropriate.

Respect: respectful of peers, faculty, staff, patients, and families; respects privacy and confidentiality.

Self-Awareness: fosters continued professional development; demonstrates emotional intelligence; maintains appropriate boundaries with patients and colleagues; avoids inappropriate sharing of health information of others; recognizes position as a role model for others.

Self-Care: maintains personal health and hygiene; seeks advice, counsel, or tutoring when recommended by others; avoids harmful behaviors; avoids inappropriate remarks; adheres to local dress codes.

Sense of Duty: completes assigned duties; sets and achieves realistic goals; follows policies; responds promptly when called; is detail-oriented; accepts inconvenience in meeting the needs of patients; volunteers one's skills and expertise for the welfare of the community; seeks active roles in organizations.

Social Responsibility: demonstrates an unselfish regard for others (altruism); advocates for quality in the care of patients recognizes and addresses the social determinants of health as applies to patients and communities; advocates for reducing disparities in health care; understands the threats to medical professionalism posed by conflicts of interest.

Teamwork: works well with others; adheres to polices on authorship of documents; inspires trust; is respectful of different socioeconomic backgrounds and cultural traditions; is sensitive to team member needs; respects authority; provides honest, respectful feedback.

Trustworthiness: displays honesty and ethical behaviors in all academic pursuits including study and research; is honest in interactions with patients, peers, and the community; does not report private academic information of other students.

Companion policies include:

- Honor Code
- Teacher-Learner Compact
- Violations of the Honor Code and/or Attributes of Professionalism
- Virginia Intercollegiate Anatomy Laboratory (VIAL): Rules, Policies, and Procedures.
- Use of Human Cadavers and the Virginia Intercollegiate Anatomy Laboratory (VIAL)
- Social Media
- Dress code

Virginia Tech Carilion School of Medicine (VTCSOM)

Statement: **Violations of the Honor Code, Attributes of Professionalism and/or Teacher-Learner Compact**
Subject: **Student Affairs**
Administrator: **A. Knight**
Rev.: **3**
Original date: **9/12/2017**
Revision dates: **12/8/2016, 8/2/2017**

1 Purpose

VTCSOM takes the precepts outlined in the Attributes of Professionalism, the VTCSOM Honor Code, and the Teacher-Learner Compact quite seriously and has developed a prescribed process regarding alleged student violations of either of them. The Medical Student Performance and Promotion Committee (MSPPC) is delegated the ultimate responsibility for overseeing the student conduct system. The process of addressing concerns is an incremental one, and could involve a hearing by the MSPPC to consider varying actions (see below) that would affect the status of a medical student at VTCSOM up to and including dismissal from VTCSOM.

2 Policy

Definitions of the various committees

1. Medical Student Performance and Promotion Committee (MSPPC)- the VTCSOM committee delegated with the ultimate responsibility for overseeing the student conduct system. The membership of the MSPPC is further described in the student and faculty handbooks.
2. Student Conduct Committee- a sub-committee of the MSPPC which conducts the initial hearings related to violations of the VTCSOM Attributes of Professionalism and/or Teacher-Learner Compact and reports to the MSPPC. The committee is made up of one representative from each of the four value domains (Basic Science, Clinical Science, Research, and Interprofessionalism), two students who are not members of the MSPPC, and the Senior Dean for Student Affairs. The committee is chaired by the Senior Dean for Academic Affairs.
3. Honor Council- a sub-committee of the MSPPC which conducts the initial hearings related to violations of the VTCSOM Honor Code and reports to the MSPPC. The committee is chaired by the Senior Dean for academic Affairs and composed of the chair and two students who are not members of the MSPPC.

Honor Code Violation

Circumstances may arise when a faculty member, staff member, medical school administrator, resident physician, other healthcare worker, fellow student, or other individual involved directly or indirectly with medical student education feels that a student has violated the terms of the VTCSOM Honor Code. When this occurs, the following process should be followed.

1. Any individual who witnesses a potential violation of the Honor Code should report this to the Senior Dean for Academic Affairs.
2. The Senior Dean for Academic Affairs will convene a meeting of the Honor Council.

3. The Honor Council will meet with the involved student and the individual(s) filing the allegation as soon as possible and within five (5) business days. The Senior Dean for Student Affairs will be present in support of the student; the student may self-select one addition support person. The student will be given an opportunity to explain or rebut any of the evidence or information concerning conduct or circumstances contained in the written allegation.

Student Violation of the Attributes of Professionalism and/or Teacher-Learner Compact

Circumstances may arise when a faculty member, staff member, medical school administrator, resident physician, other healthcare worker, fellow student, or other individual involved directly or indirectly with medical student education feels that a student has exhibited an action or behavior that they would consider unprofessional or academically dishonest in nature and/or could be in violation of the Attributes of Professionalism and/or the Teacher-Learner Compact but does not rise to the level of an Honor Code violation. When this occurs, the following process should be followed. The incremental process identifies a hierarchy of individuals who may address the concern.

1. The individual who has witnessed or experienced the behavior may address their concern directly with the student, identifying the specifics of their concern and requesting that the behavior stop or other action be taken to correct the situation.
2. If that fails to correct the situation or if the individual so chooses, he/she may address his/her concern verbally or in writing with whomever would be considered their direct report or the student's direct supervisor in the context in which the concerning behavior has occurred.
3. If that fails to correct the situation or if the individual so chooses, he/she may address his/her concern with the appropriate Domain or Clerkship Director.
4. If that fails to correct the situation or if the individual so chooses, he/she may address his/her concern with either the Senior Dean for Student Affairs or the Senior Dean for Academic Affairs (or designee).
5. Once any individual involved in the process has determined that they will address the concern, they must meet with the student within three (3) business days of when the concern is brought to their attention. During this meeting they are to discuss the nature of the concern/s and identify possible resolution. Should an understanding be reached regarding a resolution, all those who were involved in the process will be informed of the proposed resolution by the person who addressed the concern. If the behavior continues or is repeated after an apparent resolution has been determined, this should be reported in writing the Senior Dean for Student Affairs or the Senior Dean for Academic Affairs (or designee) and request that the Student Conduct Committee be convened.
6. If the person who initially raised the concern is not satisfied with the outcome of the initial inquiry, they may request that the concern be forwarded to the Senior Dean for Student Affairs or the Senior Dean for Academic Affairs (or designee) and request that the Student Conduct Committee be convened.
7. At any point in this process, based on the nature of the concern, the repetitive nature of it, the comfort of the individual in addressing the concern, or the student's response when the concern is brought to their attention, any of the above individuals may bring the concern directly to the Senior Dean for Student Affairs or

the Senior Dean for Academic Affairs (or designee) and request that the Student Conduct Committee be convened.

8. All concerns brought to Senior Dean for Student Affairs or the Senior Dean for Academic Affairs (or designee) with a request that the Student Conduct Committee be convened should be in writing, specifying in appropriate detail the nature of the concern. The receipt of such information by Senior Dean for Student Affairs or the Senior Dean for Academic Affairs (or designee) will automatically lead to a formal investigation of the concern by the Student Conduct Committee and will be done within three (3) business days.
9. Though not required, the Senior Dean for Student Affairs encourages any concerns regarding student conduct to be brought to his/her attention, even if a satisfactory resolution has been reached. This should be done in writing. If this is done, the communication should specify that no further action is requested ("FYI").
10. If during the investigation into the complaint it is felt that the accusation/s made against the student are unwarranted or frivolous, such actions would be addressed with the direct supervisor of the individual who initially raised the concern.
11. Once a formal investigation is initiated by the Student Conduct Committee, it is considered unprofessional conduct for an accused student to share the details of this investigation with anyone without prior permission from the Senior Dean for Student Affairs. The frivolous, gratuitous, and/or damaging spread of information is an unprofessional action and could in itself result in the student being referred to the MSPPC for disciplinary action.

Protecting Confidentiality:

Circumstances may arise when an individual feels the need to bring forth a concern regarding a student to the school administration but for whatever reason desires to remain anonymous. In such circumstances, the individual is encouraged to contact their supervisor to initiate the grievance. The process of addressing the concern would be that listed above, with the exception that the individual who addresses the concern with the student would be the supervisor who would serve as the proxy for the person who brought forth the concern and wished to remain anonymous. It must be recognized that the ongoing desire for anonymity on the part of the person raising the concern may limit those involved with investigating the complaint and attempting to determine a resolution.

Suspension from School:

In circumstances when it is felt that a student's presence on campus or in the clinical setting, based on the nature of the concern, could have the potential to adversely impact the safety and/or well-being of others, that student may be placed in a suspension status and barred from campus by joint agreement of the Senior Dean for Student Affairs and the Chair of the MSPPC pending an MSPPC hearing. Should this occur, the Dean must be notified in writing and an emergency meeting of the MSPPC must be held within 3 business days to review the circumstances of the violation and make recommendations. The student's suspension status would be reviewed as part of the emergency meeting and could be extended by a determination of the MSPPC.

3 Procedures

Hearing related to an Honor Code Violation

1. The individual who witnessed the potential violation of the Honor Code should report this to the Senior Dean for Academic Affairs.
2. A confidential file maintained by the Senior Dean for Student Affairs will be created. Access to this file shall be restricted to the Senior Dean for Student Affairs and is not part of the student's permanent record. The Senior Dean for Student Affairs may share information from this file, as necessary, with the accused student, the Chair of the MSPPC, the Dean, other medical school leadership, and VTCSOM legal counsel as he/she deems appropriate.
3. The Senior Dean for Student Affairs will make the student aware of the allegation in writing or, preferably, in person.
4. The Chair of the MSPPC will be made aware of the allegation.
5. The Senior Dean for Student Affairs may mandate a psychiatric, psychological, and/or substance abuse evaluation at any point in the investigation, or as part of the corrective action. The results of this mandated assessment must be made available to the Senior Dean for Student Affairs as well as the Chair of the MSPPC should the MSPPC become involved.
6. The Senior Dean for Academic Affairs will convene a meeting of the Honor Council.
7. The Honor Council will meet with the involved student and the individual(s) filing the allegation as soon as possible and within five (5) business days. The Senior Dean for Student Affairs will be present in support of the student; the student may self-select one addition support person. The student will be given an opportunity to explain or rebut any of the evidence or information concerning conduct or circumstances contained in the written allegation.
8. After reviewing all pertinent information, the subcommittee shall make one of the following recommendations within five (5) business days:
    a. Refer the matter to the MSPPC for further investigation, hearing, and action.
    b. Dismiss the matter due to insufficient evidence. If the Honor Council is not in full agreement with regards to their decision, the matter must be referred to the MSPPC for investigation and hearing.
9. The MSPPC Chair will review the subcommittee's recommendation and supporting information and:
    a. If a hearing is required, the Chair must initiate the procedure by notifying the student by letter following the process outlined below.
    b. If the matter has been dismissed due to insufficient evidence, the Chair shall inform the student and the Senior Dean for Student Affairs in writing of this decision and shall expunge the record. It is the responsibility of the Senior Dean for Student Affairs to contact other involved parties, including the individual/s who brought forth the allegation/s, to let them know of this decision.

Hearing related to a Violation of the Attributes of Professionalism and/or Teacher-Learner Compact:

1. As outlined above, a concern regarding a possible violation of the Attributes of Professionalism and/or Teacher-Learner Compact including but not limited to unprofessional behavior may be raised at any time by any member of the VTCSOM

community. If an allegation is submitted in written form, it should describe in detail the specific violation to allow review by the appropriate persons and/or committees, and to inform the student of the nature of the offences or conduct which must be explained and should be signed by the person who is raising the concern/allegation. The receipt of a written allegation of unprofessional behavior by the Senior Dean for Student Affairs or Senior Dean for Academic Affairs requires the convening of the Student Conduct Committee for a formal inquiry. A confidential file maintained by the Senior Dean for Student Affairs will be created. Access to this file shall be restricted to the Senior Dean for Student Affairs and is not part of the student's permanent record. The Senior Dean for Student Affairs may share information from this file, as necessary, with the accused student, the Chair of the MSPPC, the Dean, other medical school leadership, and VTCSOM legal counsel as he/she deems appropriate.

2. The Senior Dean for Student Affair and/or Senior Dean for Academic Affairs, upon receipt of a written allegation of unprofessional behavior, is authorized to convene a meeting of the Student Conduct Committee.
3. The details of the complaint and plans for the Student Conduct Committee timeline are made available to the chair of the MSPPC.
4. The Senior Dean for Student Affairs will make the student aware of the allegation in writing or, preferably, in person.
5. The Senior Dean for Student Affairs may mandate a psychiatric, psychological, and/or substance abuse evaluation at any point in the investigation, or as part of the corrective action. The results of this mandated assessment must be made available to the Senior Dean for Student Affairs as well as the Chair of the MSPPC should the MSPPC become involved.
6. The Student Conduct Committee will meet with the involved student and the individual(s) filing the allegation as soon as possible and within five (5) business days. The Senior Dean for Student Affairs will be present in support of the student; the student may self-select one addition support person. The student will be given an opportunity to explain or rebut any of the evidence or information concerning conduct or circumstances contained in the written allegation.
7. After reviewing all pertinent information, the committee shall make one of the following recommendations within five (5) business days:
    a. Refer the matter to the MSPPC for further investigation, hearing, and action.
    b. Dismiss the matter due to insufficient evidence.
8. The MSPPC Chair will review the subcommittee's recommendation and supporting information and:
    a. If a hearing is required, the Chair must initiate the procedure by notifying the student by letter following the process outlined below.
    b. If the matter has been dismissed due to insufficient evidence, the Chair shall inform the student and the Senior Dean for Student Affairs in writing of this decision and shall expunge the record. It is the responsibility of the Senior Dean for Student Affairs to contact other involved parties, including the individual/s who brought forth the allegation/s, to let them know of this decision.

Appearing Before the MSPPC:

If the need for an MSPPC hearing has been determined, the MSPPC Chairperson shall notify the student by letter of the details of the dismissal hearing at least ten (10) business days prior to the scheduled MSPPC hearing. The Chairperson shall send the letter by certified mail, return receipt requested, to the student at his/her address appearing in the registrar's records. The letter may also be hand delivered to the student by the Senior Dean for Student Affairs with the student signing a document acknowledging receipt of the letter. A copy of the letter will be sent to the Senior Dean for Student Affairs who will be available to advise the student in matters pertaining to the hearing. In the event that the Chairperson is unable to have the letter personally delivered to the student or the student does not sign the receipt for the certified letter, after reasonable attempts, the MSPPC Chairperson may show by sworn statement that a reasonable attempt has been made to provide notice to the student, and the MSPPC shall proceed with the hearing.

The letter to the student shall:

A. Document the alleged violation(s) if professional behavior or academic dishonesty;
B. Direct the student to be present at the specified time, date, and place of the dismissal hearing;
C. Advise the student of his/her rights to:
    a. Appear in person alone or with one student-selected member of the VTC community.
    b. The student may request up to two (2) additional members of the VTC community to attend the hearing to provide support. The granting of this request is entirely at the discretion of the Chair of the MSPPC, taking into account issues of confidentiality and hearing decorum. None of these support persons may participate in the hearing. This request must be made in writing to the Chair of the MSPPC at least 5 business days prior to the hearing.
    c. Have legal counsel present. Legal counsel may make no statements, may not ask questions, and may not submit written or other materials.
    d. Request the Chair of the MSPPC recuse any persons designated to hear the case for cause or conflict of interest.
    e. Know the identity of each person who will provide information in the case.
    f. Summon individuals to provide supporting information, require production of documentary and other evidence, offer evidence, and argue in his/her own behalf.
    g. Question each person who will provide information in the case for the purpose of clarification.
    h. Receive a copy of the secretary's summary of the hearing which will not include a summary of the committee’s deliberations.
    i. Appeal the decision of the MSPPC to the Dean.
D. Direct the student that they shall disclose through the Committee Chairperson no later than five (5) business days before the meeting their intent to be assisted by legal counsel during the meeting. Failure to provide notification will result in forfeiture of the right to have legal counsel present.
E. Indicate that the student shall disclose to the Committee Chairperson no later than five (5) business days before the meeting, the names of any persons to be called to the meeting to speak on behalf of the student with regard to the allegations...

F. List the names of any individuals the Committee will call to provide information concerning the allegations at the hearing.
G. Indicate that any member of the MSPPC may question the involved student and anyone else who provides information on the student's behalf.

The MSPPC Chairperson shall compile a list of all individuals who will present information on behalf of either the student or VTCSOM and shall distribute the list to the student and to each member of the MSPPC four (4) business days before the meeting. In deciding the question of dismissal, the MSPPC has the right and responsibility to review the student's entire record. The MSPPC for good cause may postpone the hearing and notify all involved persons of the new hearing date, time, and place. Upon request of the student, the MSPPC also may waive the ten business day period of notice, informing all involved persons of the new hearing date, time, and place.

The Hearing will be conducted with the objective of providing basic fairness to all parties. For disciplinary hearings of the MSPPC, a quorum is considered a simple majority of the committee members. This number must include at least one student member. The proceedings of the MSPPC meeting may be recorded at the discretion of the committee Chair. The purpose of this recording is to provide clarification for the members of the MSPPC. There will be no transcript made of this recording, and the recording will be destroyed once the case has been resolved or the appeals process has been exhausted. The MSPPC Chairperson shall preside during the meeting according to the following procedure:

1. The Chair of the MSPPC presents an overview of the procedure to the student. The Chair of the MSPPC or the Senior Dean for Academic Affairs will review the allegations against the student.
2. VTCSOM legal counsel may be present.
3. The student presents his/her case.
4. The student may have legal counsel present under the conditions outlined above.
5. The student’s legal counsel, if present, may make no statements, may not ask questions, and may not submit written material.
6. Persons called to the meeting may present information and then may be questioned by the student and members of MSPPC. The purpose of the student questioning is for clarification of the information presented, and is not intended to rebut the statements of any individuals presenting.
7. After all information has been presented by those appearing before the committee and these individuals are no longer present at the hearing, the student may present rebuttal evidence and counter-arguments. Members of the MSPPC may ask questions.
8. The MSPPC deliberates on the information presented with the student absent and makes a decision.

The proceedings of the MSPPC are confidential and any discussion of the proceedings or the facts revealed, outside of the committee meeting, is a violation of the student’s right to privacy and will be viewed as unprofessional and subject to disciplinary action as such. Exceptions to this would include the sharing the outcome of the meeting or important information from the meeting with appropriate VTCSOM leadership and others as deemed appropriate by the Chair of the MSPPC.

It is also considered unprofessional conduct for an accused student to share the details of the MSPPC proceedings outside of the committee hearing without prior permission from the Chair of the MSPPC. Doing so will be considered unprofessional conduct and could result in disciplinary action by the MSPPC.

MSPPC Actions:

The MSPPC Chairperson submits in writing the decision of the Committee to the parties involved within two (2) business days of the hearing. Possible actions can include:

1. Finding the complaint was without merit;
2. Reprimand acknowledging the conduct was not in accord with the Honor Code, Attributes of Professionalism, and/or Teacher- Learner Compact but that it was not of a serious enough nature to take further action;
3. Probation acknowledging the conduct was not in accord with the Honor Code, Attributes of Professionalism, and/or Teacher- Learner Compact and that further monitoring or intervention is required. This could include a referral for a mandatory psychiatric, psychological, and/or substance abuse evaluation as a condition of the probation. If such a referral for a mandatory evaluation is required, the results of this evaluation must be released to the Chair of the MSPPC for review by the MSPPC. Any financial expenses incurred for such an evaluation will be the responsibility of the student;
4. Disciplinary leave of absence acknowledging the conduct was not in accord with the Honor Code, Attributes of Professionalism, and/or Teacher- Learner Compact and that corrective action is needed prior to the student returning to classes. This could include a referral for a mandatory psychiatric, psychological and/or substance abuse evaluation as a condition of return.
5. Dismissal acknowledging the conduct was not in accord the Honor Code, Attributes of Professionalism, and/or Teacher- Learner Compact and was of such an egregious nature that it is not appropriate for the student to remain at VTCSOM.

The decision shall detail the reasons for the action recommended. After completion of MSPPC proceedings, all documents and records of the case shall be filed in the Student Affairs file. Notation of the MSPPC action will be made in the student's permanent record only if the final decision is for dismissal and this decision is upheld should the student appeal to the Dean. The Hearing record is confidential and consists of a copy of the notice forwarded to the student, a written summary of the hearing prepared by the Chair of the MSPPC, together with all documentary and other evidence offered or admitted in evidence, written motions, pleas and any other material considered by the MSPPC, and the decision of the MSPPC.

Appeals to the Dean:

The student may appeal the MSPPC decision directly to the Dean of VTCSOM. Grounds for appeals are limited to the following:

a. The proceedings were not conducted fairly in light of the charges and information presented and according to the VTC designated procedures in such a way that resulted in significant prejudice against the accused student;
b. Significant information was not available to the individual or the MSPPC at the time of the hearing or has subsequently come to light;

c. The sanction imposed was believed to be inappropriate to the severity of the violation for which the student was found responsible.

The appeal to the Dean must be made in writing within ten (10) business days after the date of the written decision of the MSPPC. The written request for an appeal shall contain the student's name, the date of the decision, all supporting materials accompanying the request, and the name of the student's representative, if any.

A written request of appeal suspends the imposition of sanctions or penalty until the appeal is finally decided. Pending appeal, the Dean may suspend the right of the student to attend class and/or engage in academic programs for reasons relating to the student's physical or emotional safety and wellbeing, or for reasons relating to the safety and well-being of patients, students, or faculty.

The Dean may approve, reject, or modify the decision in question or may require that the original hearing be reopened for the presentation of additional evidence and reconsideration of the decision. The Dean's decision must be forthcoming within five (5) business days of the date of the receipt of all supporting materials. The Dean's decision shall be communicated in writing to the student, the Senior Dean for Student Affairs, the Chair of the MSPPC, and any other parties involved as determined by the Dean. The timeline described in this process (MSPPC meeting through appeal to Dean) may be altered at each level by mutual agreement between the student and the Chair of MSPPC and/or the Dean due to extenuating circumstances. The Dean's decision cannot result in a harsher sanction than the original decision of the MSPPC. Rather, the Dean can uphold the original sanction or decide on a lesser sanction.

The Dean's decision is final and not subject to further appeal. A student who has been dismissed from VTCSOM is not permitted to be reinstated or reapply for admission.

Non-Academic Probation:

The MSPPC is responsible for monitoring student probation status. If a student is placed on probation by the MSPPC, the student must complete the requirements of the probation and inform the Chair of the MSPPC by providing written detail of as to how they have completed the requirements. Once the Chair of the MSPPC has determined that the terms of the probation have been completed, the Chair will contact the Senior Dean for Student Affairs in writing, outlining that the student has completed the requirements of the probation and is no longer in a probationary status. The MSPPC has the option of interviewing the student prior to making this determination at an informal hearing. Student probation will not be recorded on the student's permanent record. These records will be kept in their Student Affairs file.

If a student does not complete the terms of the probation, this would constitute a violation of their probation status and the MSPPC will hold a formal hearing and proceed according to the policy detailed above.

Disciplinary Leave of Absence:

Only the MSPPC can place a student on a disciplinary leave of absence, or approve the return of a student to coursework from a disciplinary leave of absence. The MSPPC may

consider requests to return from a disciplinary leave of absence when the student has completed the terms requested by the MSPPC, which may in some circumstances include a mandatory psychiatric, psychological, and/or substance abuse evaluation. The student must complete the requirements of the leave of absence and provide written detail to the Chair of the MSPPC once these requirements have been completed. Once the MSPPC has determined that the terms of the leave of absence have been completed, the Chair of the MSPPC will contact the Senior Dean for Student Affairs in writing, outlining that the student has completed the requirements of the leave of absence and is no longer in a disciplinary leave of absence status. The MSPPC has the option of interviewing the student prior to making this determination at an informal hearing. Student disciplinary leave of absence will not be recorded on the student's permanent record. These records will be kept in their Student Affairs file.

Conflict of Interest:

In the event of conflict of interest, real or perceived, members of the MSPPC will be expected to recuse themselves from the official proceedings of the committee. The student has the right to challenge the presence of individual members of the MSPPC at the hearing. The determination of such a conflict will be made by the Chair of the MSPPC. If the Chair of the MSPPC is the individual in question, the determination of such a conflict will be made by the Senior Dean for Academic Affairs

Virginia Tech Carilion School of Medicine (VTCSOM)

Statement: **Teacher-Learner Compact**
Subject: **Student Affairs**
Administrator: **A. Knight**
Rev.: **3**
Original date: **9/1/2010**
Revision dates: **11/29/2015, 12/2/2016**

VTCSOM recognizes that preparation for a career in medicine demands acquisition of a large fund of knowledge and a wide variety of skills. It also demands strengthening virtues that support the relationship between doctor and patient and sustain the practice of medicine as a moral enterprise. The process of undergraduate medical education requires substantial involvement and contribution from faculty members and students. The Teacher-Learner Compact serves both as a pledge and as a reminder to teachers and learners that their conduct in fulfilling their mutual obligations is the medium through which the profession inculcates its ethical values.

Students are exposed to multiple learning environments in clinical and non-clinical settings throughout the course of their medical education. These learning environments must support and reinforce the professional attributes, principles, and responsibilities outlined in the Standards of Ethical and Professional Conduct Policy. All faculty and students, commit to uphold the guiding principles, responsibilities, and commitments put forth in this agreement.

The responsibilities for faculty will include:

1. Treat learners with respect.
2. Treat learners and colleagues equally without regard to gender, race, disability, cultural origins, age, or religious beliefs.
3. Treat colleagues and patients in a professional manner.
4. Provide current, high quality materials in an effective format for learning.
5. Respect the student's time by:
    a. Being on time for scheduled encounters.
    b. Developing educational experiences which are meaningful to the practice of medicine and reasonable for the time period allotted.
6. Provide timely and constructive feedback.
7. Provide a role model for professionalism.

The commitments of faculty include:

- ✓ We pledge our utmost effort to ensure that all components of the educational program for students are of high quality.
- ✓ As mentors for our student colleagues, we maintain high professional standards in all of our interactions with patients, colleagues, and staff.
- ✓ We respect all students as individuals, without regard to gender, race, national origin, religion, or sexual orientation; we will not tolerate anyone who manifests disrespect or who expresses biased attitudes towards any student.
- ✓ We pledge that students will have sufficient time to fulfill personal and family obligations, to enjoy recreational activities, and to obtain adequate rest; we monitor and, when necessary,

reduce the time required to fulfill educational objectives, including time required for "call" on clinical rotations, to ensure students' well being.

- ✓ We do not tolerate any abuse or exploitation of students.
- ✓ We encourage any student who experiences mistreatment or who witnesses unprofessional behavior to report the facts immediately to appropriate faculty or staff; we treat all such reports as confidential and do not tolerate reprisals or retaliations of any kind.

The responsibilities for students will include:

1. Treat learners, faculty, and patients with respect and professionalism.
2. Treat learners and faculty equally without regard to gender, race, disability, cultural origins, age, or religious beliefs.
3. Commit the time and energy necessary to attain the goals and objectives of the curriculum.
4. Respect the time of other students and faculty by being on time for scheduled educational encounters.
5. Contribute to the quality of group assignments and work products by actively engaging in discussion, problem solving, and development of materials.
6. Communicate concerns and suggestions regarding learning environment and educational community in a timely, constructive, and professional manner.

The commitments of students include:

- ✓ We pledge our utmost effort to acquire the knowledge, skills, attitudes, and behaviors required to fulfill all educational objectives established by the faculty.
- ✓ We cherish the professional virtues of honesty, compassion, integrity, fidelity, and dependability.
- ✓ We pledge to respect all faculty members and all students as individuals, without regard to gender, race, national origin, religion, or sexual orientation.
- ✓ As physicians in training, we embrace the highest standards of the medical profession and pledge to conduct ourselves accordingly in all of our interactions with patients, colleagues, and staff.
- ✓ In fulfilling our own obligations as professionals, we pledge to assist our fellow students in meeting their professional obligations, as well.

RESOLUTION TO REVISE THE GRADUATE HONOR SYSTEM CONSTITUTION

WHEREAS, the Virginia Tech community values academic integrity; and

WHEREAS, all graduate students are expected to uphold the Graduate Honor Code and exercise honesty and ethical behavior in all their academic pursuits at Virginia Tech, including study, course work, research, extension, or teaching; and

WHEREAS, the Graduate Honor System Constitution was alerted to problems in the appeals process and a desire to update language and penalties,

WHEREAS, a committee of faculty, graduate students, and administrators reviewed and revised the Constitution using guidance from other systems in the university and past cases to address concerns regarding the appeals process, and include more learner-centered language and penalties; now,

THEREFORE, BE IT RESOLVED, that the 2018 Constitution of the Graduate Honor System be adopted (attached below) as the guiding document regarding academic integrity and the process of reviewing violations for graduate students, and that the 2009 Constitution of the Graduate Honor System be retired (attached below).

RECOMMENDATION:

That the Board of Visitors approve the Resolution to Revise the Graduate Honor System Constitution.

June 4, 2018

Summary of GHS Constitution Proposed Revisions

A constitution review committee was convened in Spring 2018 by Karen DePauw, Vice President and Dean for Graduate Education, to consider proposed amendments to the language of the constitute and review and revise the Appeal Process (Article VI, Section 2). The committee was chaired by Erin Lavender-Stott, chief justice of the GHS.

After a thorough review and discussion, the committee proposes the following changes:

- Update terminology to better reflect the educational mission and functions of the honor system (all articles and sections):
    - Change the title of chief justice to chair
    - Change the title of investigator to associate chair
    - Change investigative board to preliminary review panel
    - Change judicial panel to review panel
    - Simplify language describing the referral and review process (Article IV, sections 2, 3 and 4; Article V, sections 1, 2 and 3)
- Describe panelist recruitment and appointment process with greater clarity (Article II, sections 8 and 9)
- Update the appeal process (Article VI, section 2):
    - Define a new role of appellate officers (Director of Undergraduate Academic Integrity Office, Associate Dean for Professional Programs in the College of Veterinary Medicine, or Associate Vice President for Research Compliance)
    - Describe a new appeal review and decision process (see attached flow chart)
- Update penalty options (Article VII, Section 1):
    - Remove penalty option of performing community service hours
    - Introduce new penalty option of writing an reflection essay
    - Introduce new penalty option of ethics course requirement (GRAD 5014: Academic Integrity and Plagiarism)
    - Update penalty option “F#” (penalty 1. g) to “F” to reflect actual practice of how the GHS-assigned F grade appears on the transcript
- Update announcements about GHS cases to reflect changes in available media for information distribution (Article VII, Section 3)
- Update or remove references to outdated internal and external resources (Article V, Section 3; Article IX, Section 2; Article X, Article XI) such as websites.

2018

ARTICLE I: PURPOSE AND DESCRIPTION

Section 1 - Graduate Honor Code

The Graduate Honor Code establishes a standard of academic integrity. As such, this code demands a firm adherence to a set of values. In particular, the code is founded on the concept of honesty with respect to the intellectual efforts of oneself and others. Compliance with the Graduate Honor Code requires that *all* graduate students exercise honesty and ethical behavior in all their academic pursuits at Virginia Tech, whether these undertakings pertain to study, course work, research, extension, or teaching.

It is recognized that graduate students have very diverse cultural backgrounds. In light of this, the term *ethical behavior* is defined as conforming to accepted professional standards of conduct, such as codes of ethics used by professional societies in the United States to regulate the manner in which their professions are practiced. The knowledge and practice of ethical behavior shall be the full responsibility of the student. Graduate students may, however, consult with their major professors, department heads, International Graduate Student Services, or the Graduate School for further information on what is expected of them.

More specifically, all graduate students, while being affiliated with Virginia Tech, shall abide by the standards established by Virginia Tech, as described in this Constitution. Graduate students, in accepting admission, indicate their willingness to subscribe to and be governed by the Graduate Honor Code and acknowledge the right of the University to establish policies and procedures and to take disciplinary action (including suspension or expulsion) when such action is warranted. Ignorance shall be no excuse for actions which violate the integrity of the academic community.

The fundamental beliefs underlying and reflected in the Graduate Honor Code are that (1) to trust in a person is a positive force in making a person worthy of trust, (2) to study, perform research, and teach in an environment that is free from the inconveniences and injustices caused by any form of intellectual dishonesty is a right of every graduate student, and (3) to live by an Honor System, which places a positive emphasis on honesty as a means of protecting this right, is consistent with, and a contribution to, the University's quest for truth.

Section 2 - Implementation

The Graduate Honor System was established to implement the Graduate Honor Code, and its functions shall be:

1. To promote honesty and ethical behavior in all academic pursuits, including, but not limited to, study, research, teaching, and extension.

2. To disseminate information concerning the Graduate Honor System to all new graduate students, faculty, and other interested parties.
3. To consider and review all suspected violations of the Graduate Honor Code in an impartial, thorough, and unbiased manner.
4. To review all cases involving academic infractions of the Graduate Honor Code brought before the System.
5. To assure that the rights of all involved parties are protected and assure due process in all proceedings.

Section 3 - Violations

All forms of academic work including, but not limited to, course work, labwork, thesis or dissertation work, research, teaching, and extension performed by any graduate student enrolled on a part-time or full-time basis under any of the admission categories listed in the Virginia Tech Graduate Catalog shall be subject to the stipulations of the Graduate Honor Code. Violations of the Graduate Honor Code are categorized as follows: Cheating, Plagiarism, Falsification, and Academic Sabotage. Violations are defined as follows:

1. *Cheating:* Cheating is defined as the giving or receiving of any unauthorized aid, assistance, or unfair advantage in any form of academic work. Cheating applies to the products of all forms of academic work. These products include, but are not limited to, in-class tests, take-home tests, lab assignments, problem sets, term papers, research projects, theses, dissertations, preliminary and qualifying examinations given for the fulfillment of graduate degrees, or any other work assigned by an instructor or professor, graduate committee, or department that pertains to graduate work or degrees.

   Any student giving or receiving unauthorized information concerning a test, quiz, or examination shall be responsible for an Honor Code violation. Submitting work that counts towards the student's grade or degree which is not the sole product of that student's individual effort shall be considered cheating, unless, for example, the professor explicitly allows group work, use of out-of-class materials, or other forms of collective or cooperative efforts. In general, all academic work shall be done in accordance with the requirements specified by the instructor or professor. In the absence of specific allowances or instructions by the professor, students shall assume that all work must be done individually.

   Some uses of permanently returned, graded material ("koofers") are cheating violations of the Code. By permanently returning graded materials, a faculty member or instructor demonstrates the intent that these materials should be accessible to all students. Such materials may be used for study purposes, such as preparing for tests or other assignments, and other uses explicitly allowed by the professor or course instructor. Once test questions have been handed out, koofers may not be used. Other specific examples of the unauthorized use of koofers include, but are not limited to, using koofers during closed-book exams, handing in any type of copy (e.g., a photocopy or a transcribed copy) of someone else's work (partial or complete) from a previous term, and copying a current answer key or one that was handed out in a previous term. Students may not copy and

hand in as their own work answers taken from any kind of koofer. When in doubt of what may or may not be used, students should consult with the course instructor. In the absence of specific instructions concerning koofers from the instructor, students shall assume that all submitted work must be the product of their own efforts without koofers or other unauthorized aid/ materials.

2. *Plagiarism:* Plagiarism is a specific form of cheating, and is defined as the copying of the language, structure, idea, and/or thoughts of another and claiming or attempting to imply that it is one's own original work. It also includes the omitting of quotation marks when references are copied directly, improper paraphrasing (see Plagiarism), or inadequate referencing of sources. Sources used in preparing assignments for classes, theses, dissertations, manuscripts for publication, and other academic work should be documented in the text and in a reference list, or as directed by the instructor or professor. Sources requiring referencing include, but are not limited to, information received from other persons that would not normally be considered common knowledge (Plagiarism), computer programs designed or written by another person, experimental data collected by someone else, graded permanently-returned materials such as term papers or other out-of-class assignments (koofers), as well as published sources. A more detailed discussion of plagiarism may be found in Plagiarism.
3. *Falsification:* Students who falsify, orally, in writing, or via electronic media, any circumstance relevant to their academic work shall be responsible for a violation of this Code. Included are such actions as forgery of official signatures, tampering with official records or documents, fraudulently adding or deleting information on academic documents, fraudulently changing an examination or testing period or due date of an assignment, and the unauthorized accessing of someone else's computer account or files. Violations also include willfully giving an improper grade or neglecting to properly grade submitted material, improperly influencing the results of course evaluations, and knowingly including false data or results in any paper or report submitted for a grade, as a degree requirement, or for publication.
4. *Academic Sabotage:* Academic sabotage is purposeful vandalism directed against any academic endeavor or equipment. It includes, but is not limited to, the destruction or theft of written material, laboratory or field experiments, equipment used in teaching or research, or computer files or programs. Unauthorized tampering with computer programs or systems shall constitute a violation. Academic sabotage includes deliberately crashing or attempting to crash a computer system or the use of files intended to cause or actually causing computer systems to behave atypically, thereby impeding another person's or group's efforts. In particular, knowingly infecting any system with a virus, worm, time bomb, trap door, Trojan horse, or any other kind of invasive program shall be considered a serious violation. Note that violations under this category may also lead to University judicial action or to criminal suits charged by the University.

Misconduct and unethical behavior in research and teaching deserves special mention in the Code since it is an area of special interest to graduate students. It is not a separate violation category since it may involve cheating, plagiarism, falsification, and/or academic sabotage as discussed above. *Misconduct in research* does not include those factors intrinsic to the process of research, such as honest error, conflicting data, or differences in interpretation concerning data or experimental design. Likewise, *misconduct in teaching* does not include honest disagreement

over the method of presentation of instructional material to a class or in the evaluation of the performance of a student. Research misconduct allegations may also be investigated by the Virginia Tech Office of Research Integrity.

* For further information on *misconduct in research* and its definition, see the references listed under item 4 of *1991 Revision -- Reference Material Used*.

Section 4 - Composition

The Graduate Honor System shall consist of an Advisor, a Chair, one or more Associate Chair(s), GHS Facilitators, and Panelists for the Preliminary Review Panel and Review Panel. The Dean (or designee) of the Graduate School shall be responsible for the continued operation of the System. Appointment of Graduate Honor System personnel shall be made in accordance with Article XI, Section 7.

ARTICLE II: GENERAL ADMINISTRATION

Section 1 - Appointment of the Graduate Honor System Advisor

A member of the staff of the Dean of the Graduate School shall be appointed by the President to serve as the Graduate Honor System Advisor. The Advisor shall serve in an advisory capacity to the Chair and shall be present (or represented) at all hearings of both the Preliminary Review Panel and the Review Panel.

Section 2 - Duties and Functions of the Advisor

The following duties and functions shall be performed by the Advisor:

1. The advisor shall have the responsibility to train the Chair, Associate Chair(s), Facilitators, and new board and panel members.
2. The advisor shall provide counsel to the Chair and Associate Chair(s) in the preparation of cases.
3. The advisor shall provide staff for handling training sessions, scheduling meetings, and other matters related to the administration of the Graduate Honor System.
4. The advisor shall counsel faculty or students referring cases as well as those students charged with offenses.
5. The advisor (or designee) shall attend all hearings.
6. The advisor, in consultation with the Chair, shall be responsible for appointing the Associate Chair(s).
7. The advisor, upon the receiving the recommendation of the Chair, shall be responsible for approving the membership of the Preliminary Review Panel and Review Panel.

Section 3 - Appointment of the Chair

1. Nominations for the position of Chair shall be accepted from the Graduate Student Assembly, College Deans, and other members of the academic community, and applications by qualified persons shall be welcomed. Candidates for the position of Chair

must be graduate students in good standing and must have been in residence for at least one (1) semester immediately preceding nomination. Preferably, the nominee will have served as an Associate Chair or as a graduate student panelist for at least one (1) semester prior to appointment.

2. The term of office shall be one (1) year, but if available and willing, the current Chair may be re-appointed by the President of the University to serve subsequent terms, up to four (4) years, upon the recommendation of the Graduate Honor System Advisor.
3. The Chair Nominating Committee shall be convened by the Dean upon the resignation of the current Chair, upon completion of term of office, or upon termination of office. This committee shall consist of the Graduate Honor System Advisor, up to three (3) graduate student members of the Graduate Honor System, and one (1) faculty member having previously served on a Review Panel and appointed by the Dean of the Graduate School. All members shall have equal voting privileges. The function of this committee shall be to nominate a candidate for appointment by the President. The nomination process shall be to: (1) invite nominations and accept applications, (2) review applications and conduct interviews with applicants, and (3) recommend to the President of the University, from among these applicants, a nominee for the position of Chair. The recommendation of this committee shall be by majority vote.
4. The recommendation of the nominating committee is voted on by the Graduate Student Assembly (GSA) and the Commission on Graduate Studies and Policies (CGS&P).
5. The Dean of the Graduate School will forward the nomination to the President conveying the vote of the GSA and CGS&P.
6. The President shall appoint the Chair.
7. In the absence of a timely appointment, the President, through the recommendation of the Dean, can appoint the nominee as an interim Chair until the conclusion of the appointment process.

Section 4 - Duties and Functions of the Chair

The Chair shall perform the following duties and functions:

1. The Chair shall receive reports of suspected violations and determine, in consultation with the GHS Advisor, if the referred student is eligible for a Facilitated Discussion.
2. The Chair shall assign to the Preliminary Review Panel all cases not eligible for Facilitated Discussion.
3. The Chair shall preside at all Review Panel hearings. The Chair may request a member of the Review Panel to preside in his or her place.
4. The Chair shall assure justice, fairness, and due process.
5. The Chair shall secure nominations and select graduate student and faculty members for the Facilitated Discussion Process, the Preliminary Review Panel, and Review Panel, subject to approval by the Graduate Honor System Advisor.
6. The Chair shall assume responsibility for the instruction and training of graduate student and faculty members in the operation, function, and responsibility of the Graduate Honor System.
7. The Chair shall orient entering graduate students and new faculty to the values and obligations of the Graduate Honor Code.

8. The Chair shall conduct information activities and coordinate activities of the Graduate Honor System.
9. The Chair shall administer the operation of the Graduate Honor System throughout the entire calendar year.
10. The Chair shall keep the graduate community apprised of relevant activities of the Graduate Honor System.
11. The Chair shall consult with the Graduate Honor System Advisor in the appointment of the Associate Chair(s) and Facilitators.
12. The Chair shall select the panelists to hear the cases.

Section 5 - Staff of the Chair

The Chair, with the approval of the Graduate Honor System Advisor, shall appoint sufficient staff to assist with the duties of the office.

Section 6 - Appointment of Associate Chair(s)

1. The Graduate Honor System Advisor, in consultation with the Chair, shall appoint one or more Associate Chair(s). Nominations for this position shall be accepted from the Graduate Student Assembly, College Deans, and other members of the academic community; and applications from qualified personnel shall be welcomed. Students being considered for Associate Chair positions must be graduate students in good standing and must have been in residence for at least one (1) semester immediately preceding appointment. Preferably, the nominee will have served as a graduate student panelist of the Graduate Honor System for at least one (1) semester prior to the appointment. Associate Chair(s) shall serve a one (1) year term but may be re-appointed to serve subsequent terms, up to four (4) years, if available and willing.
2. The appointment of the new Associate Chair(s) shall be made upon the resignation of the current Associate Chair(s), upon completion of term of office, or upon termination of office.

Section 7 - Duties of Associate Chair(s)

Associate Chair(s) shall perform the following duties:

1. Associate Chair(s) shall gather evidence and conduct interviews with the referrer and the referred student(s).
2. Associate Chair(s) shall prepare a brief report summarizing the evidence.
3. Associate Chair(s) shall present the report summarizing the evidence to the referrer, referred student, and Chair before presenting it for review by the Preliminary Review Panel.
4. Associate Chair(s) shall convene and chair Preliminary Review Panel meetings.
5. Associate Chair(s) shall prepare a brief report for the Chair that summarizes the decision of the Preliminary Review Panel and shall brief the Chair on all the details of the case at hand.
6. Associate Chair(s) may attend and may present the evidence to the Review Panel.

7. Associate Chair(s) shall aid the Chair in convening and conducting training sessions for Preliminary Review Panel members.

Section 8—Appointment of Panelists

1. Panelists will include graduate students and faculty members from each College. Panelists will be recruited from all qualified graduate students and faculty (see Article XI Section 7).
2. Graduate student panelists shall be approved by the Graduate Honor System Advisor after training by the Chair and/or Associate Chair and following clearance of graduate student records (see Article XI Section 8). Graduate students may serve for up to four (4) years. After the four years, graduate students will take a one-year break from all duties related to the Graduate Honor System.
3. Faculty member panelists shall be approved by the Graduate Honor System Advisor after training by the Chair and/or Associate Chair. Faculty panelists may serve for up to four (4) years. After the four years, faculty will take a one-year break from all duties related to the Graduate Honor System.

Section 9—Duties of Panelists

1. Panelists shall sit on either the Preliminary Review Panel or the Review Panel.
2. Panelists shall evaluate the evidence and make recommendations regarding the case within a Preliminary Review Panel or Review Panel.
3. Panelists shall maintain the rights and confidentiality of the referred student(s) and referrer.
4. Panelists may assist in conducting educational sessions on campus and/or training sessions for new panelists.

Section 10 – Appointment of Graduate Honor System Facilitators

1. The Graduate Honor System Advisor, in consultation with the Chair, shall appoint one or more Graduate Honor System Facilitators. Applications for this position shall only be taken from current panelists. Graduate Honor System Facilitators must have significant experience with the Graduate Honor System as determined by the Graduate Honor System Advisor and Chair before appointment as Discussion Facilitators. Facilitators shall serve a one (1) year term but may be re-appointed to serve subsequent terms, up to four (4) years, if available and willing.
2. The appointment of new Facilitators shall be made as necessary to meet the needs of the Honor System.

Section 11 – Duties of Graduate Honor System Facilitators

1. Graduate Honor System Facilitators shall facilitate a discussion meeting between the referrer and the referred student(s).
2. Graduate Honor System Facilitators shall ensure that all applicable GHS guidelines are observed and followed.

3. Graduate Honor System Facilitators shall ensure that the rights of the referred and referrer are upheld.
4. Graduate Honor System Facilitators shall, upon examination of the facts of the case, have the authority to refer cases to the Chair so that they may be assigned an Associate Chair for evidence gathering and interviews.
5. Graduate Honor System Facilitators shall prepare a full report for the Chair, which summarizes the outcome of the facilitated discussion and shall brief the Chair on all the details of the case at hand.
6. Graduate Honor System Facilitators shall aid the Chair in conducting the training session(s) for new Graduate Honor System Facilitators.

ARTICLE III: FACILITATED DISCUSSION

Section 1 - Composition

1. The Facilitated Discussion shall be attended by the referrer(s) of the case, the referred student(s), and one Graduate Honor System Facilitator (as outlined in Article II, Sections 10 and 11).

Section 2 – Functions of the Facilitated Discussion

The Facilitated Discussion shall fulfill the following functions:

1. It shall assure that the rights of the referred and the referrer are protected and assure due process.
2. It shall facilitate a discussion between the referrer and referred student(s).
3. It shall attempt to build a consensus resolution to a suspected Honor Code violation without convening a Preliminary Review Panel or a Review Panel.
4. It shall create a record of an Honor Code violation if all parties conclude that a violation did occur. This record shall be kept in the Graduate Honor System case files.

Section 3 – Eligibility for the Facilitated Discussion

A suspected Honor Code violation will be eligible for a Facilitated Discussion if **ALL** of the following criteria are met:

1. The referrer of the case is a Faculty member;
2. The suspected violation involves an allegation of either 1) cheating or 2) plagiarism as outlined in Article I, Section 3 of the GHS Constitution;
3. The referred student(s) is(are) not on Graduate Honor System Probation at the time the report of the suspected violation is received by the Graduate Honor System;
4. And the violation is one for which a reasonable person who is familiar with the form and functions of the Graduate Honor System would not assign a penalty of more than the sanctions outlined in Article VII, Section 1, Item 1, Parts a-f of this Constitution.

Section 4 – Operation of the Facilitated Discussion

1. The Chair, after determining if a case eligible for a Facilitated Discussion, will notify the referrer and the referred of this determination.
2. The referrer and referred will then have no more than ten (10) University business days to notify the Chair of their desire to participate in a Facilitated Discussion; otherwise the case will be sent for evidence gathering and panel review. Exceptions to the ten-day period will only be made under extenuating circumstances, as determined by the Chair or Graduate Honor System Advisor.
3. If either the referrer or the referred student(s) does not agree to participate in the Facilitated Discussion, the case will be sent for investigation and panel review.
4. During the Facilitated Discussion, the referrer of the alleged violation and the referred student will attempt to reach a resolution to the case, with the assistance of the Graduate Honor System Facilitator. The question that the referred student and the referrer must answer is "did the student commit a violation of the honor code?" A determination of a violation shall require both the referrer and the referred student to agree that the student is responsible for violating the honor code. A determination of no violation shall require both the referrer and the referred student to agree that the student did not violate the honor code. In the absence of such an agreement, the case shall be sent for evidence gathering and panel review.
5. If the referrer and student agree that the student has committed a violation of the honor code, the referrer and student may then decide upon an appropriate penalty. Sanctions for the Facilitated Discussion will be limited to those sanctions outlined in Article VII, Section 1, Item 1, Parts a-f of this Constitution. The referrer and referred must both come to an agreement on the appropriate penalty. In the absence of such an agreement, the case shall be sent for evidence gathering and panel review.
6. The GHS Facilitator shall prepare a record of the outcome of the Facilitated Discussion. This record, the original report of the alleged violation, and any relevant evidence shall be held in the Chair's confidential file. The Chair shall inform the Dean of the Graduate School (or designee), in writing, of the outcome of all Facilitated Discussions.
7. For cases in which the referrer or the referred withdraws from the Facilitated Discussion, no record shall be kept that either the referrer or referred participated in a Facilitated Discussion and the fact that they did participate in such a proceeding shall not be deemed relevant in any future Honor System proceedings.

Section 5 – Withdrawal from the Decision of the Facilitated Discussion

1. The referred or referrer may withdraw from a decision reached during a Facilitated Discussion for any reason.
2. If the referred or referrer wishes to withdraw from the Facilitated Discussion decision, the Chair must be notified of the desire to withdraw from the decision within two (2) calendar days of the conclusion of the Facilitated Discussion.
3. If the referred or referrer withdraws from the Facilitated Discussion decision, the case shall be immediately sent for evidence gathering and panel review.
4. In these instances no record shall be kept that the Facilitated Discussion occurred and the fact that they did participate in such a proceeding shall not be deemed relevant in any future Honor System proceedings.

ARTICLE IV: PRELIMINARY REVIEW PANEL

Section 1 – Preliminary Review Panel Waiver

1. The referred student(s) and referrer shall have the opportunity to review the report prepared by the Associate Chair, before it is presented to a Preliminary Review Panel.
2. If, after review of the materials presented in the report, the referred student(s) accepts that there is substantive evidence to support the charge and warrant a full hearing of the case by the Review Panel, the student may request a Preliminary Review Panel Waiver. This request must be submitted to the Chair within five (5) University business days of the student(s) receiving the Associate Chair's report.
3. A request for a Preliminary Review Panel Waiver must be received before a Preliminary Review Panel is scheduled.
4. A request for a Preliminary Review Panel Waiver does not, in any way, imply guilt or responsibility on the part of the student(s).
5. In cases involving multiple referred students, if all referred students do not request a Preliminary Review Panel Waiver, the case will proceed to a Preliminary Review Panel.
6. Cases for which a Preliminary Review Panel waiver is granted shall proceed directly to a Review Panel for a hearing.

Section 2 - Composition

1. The Preliminary Review Panel shall consist of trained graduate student and faculty panelists. Graduate student members of the Preliminary Review Panel shall have full voting privileges, whereas the faculty members shall serve in an advisory capacity to the student members and shall not have voting privileges.
2. The Associate Chair(s) (or designees) shall chair Preliminary Review Panel meetings and shall not have voting privileges.
3. The Graduate Honor System Advisor shall be a non-voting member and shall serve in an advisory capacity to the Associate Chair and the Preliminary Review Panel.

Section 3 - Functions of the Preliminary Review Panel

The Preliminary Review Panel shall perform the following functions:

1. It shall evaluate the evidence provided for the case.
2. It shall decide whether a hearing before the Review Panel should be held.

Section 4 - Operation

1. For each case without a Preliminary Review Waiver, a hearing shall be conducted by a Preliminary Review Panel, consisting of a minimum of five (5) graduate students and at least two (2) faculty members, to be selected by the Chair. The Associate Chair managing the case shall serve as chair of the Preliminary Review Panel. In addition, the Graduate Honor System Advisor shall be a non-voting member and shall serve in an advisory capacity to the Associate Chair and the Preliminary Review Panel.

2. Evidence gathering shall adhere to the basic tenets of due process and to the rights and responsibilities for referrer and referred as outlined in Article VIII and Article IX.
3. A decision to send the case to the Review Panel should be based upon substantive evidence to support the charge. The lack of such evidence should lead the Preliminary Review Panel to vote against sending the case to the Review Panel and consequently lead to the termination of the proceedings. Otherwise, the Preliminary Review Panel should send the case forward for the further scrutiny of the Review Panel. The fact that the case is forwarded to the Review Panel shall in no way imply guilt or responsibility for the violation; the Preliminary Review Panel is simply stating that the case should be reviewed with the aid of personal testimonies.
4. The student members shall have full voting privileges while the faculty members serve in an advisory capacity. Recommendations of the Preliminary Review Panel must be by majority vote of the graduate student members present. In the event of a tie vote, the case will go forward.

ARTICLE V: REVIEW PANEL

Section 1 - Composition

1. The Review Panel shall consist of trained graduate student and faculty panelists. Both graduate student and faculty members of the Review Panel shall have full voting rights. The Chair (or designee) shall be a non-voting member and shall serve as the panel moderator.
2. The Graduate Honor System Advisor shall be a non-voting member and shall serve in an advisory capacity to the Chair and the Review Panel.

Section 2 - Functions of the Review Panel

The Review Panel shall perform the following functions:

1. It shall hear evidence gathered by the Associate Chair.
2. It shall hear testimony of the referrer, referred student, and witnesses.
3. It shall hear the remarks of the University community representative of the referred.
4. It shall assure that the rights of the referrer and referred student are protected and assure due process.
5. It shall determine whether a violation occurred.
6. It shall recommend the penalty when the referred is determined to have violated the honor code.

Section 3 - Operation

1. For each case, a hearing shall be conducted by a Review Panel. The Review Panel shall consist of the Chair, a minimum of four (4) graduate students, a minimum of three (3) faculty members, and the Graduate Honor System Advisor. The number of voting faculty shall not exceed the number of voting graduate students present. The graduate students and faculty members shall be selected by the Chair with the approval of the Graduate Honor System Advisor. Each graduate student and faculty member shall have full voting privileges, while the Chair (or designee) shall be a non-voting member and shall serve as

the moderator of the hearing. In addition, the Graduate Honor System Advisor shall be a non-voting member and shall serve in an advisory capacity to the Chair and the Review Panel. The Associate Chair who gathered the evidence may attend the Review Panel as a non-voting member.

2. All Review Panel hearings shall adhere to the basic tenets of due process and rights and responsibilities as outlined in Article VIII and Article IX.
3. All persons involved with the hearing have the right to be treated with respect. Persons displaying disrespect for another person at the hearing or contempt for the proceedings shall be dismissed, and the hearing shall be concluded in their absence.
4. All evidence regarding cases should be submitted to the Associate Chair(s) during the evidence gathering and interviewing process (prior to the Preliminary Review Panel meeting). If additional information is submitted after the case is sent forward by the Preliminary Review Panel, the Review Panel will decide the relevancy of that information.
5. The referred must be adjudged to have violated the honor code before any consideration is given to the penalty, unless the referred acknowledges responsibility, in which case the deliberations shall focus solely on the penalty.
6. In evaluating evidence and testimony regarding whether a violation of the honor code has occurred, each member of the Review Panel shall consider whether or not there exists substantive evidence of a violation. The decision whether a violation occurred shall be based solely on the facts regarding the charge, i.e., based on evidence collected and testimony presented at the Review Panel hearing.
7. At the conclusion of the deliberations on whether a violation occurred for each charge against the student, the Chair shall poll the members of the Panel on the question: "Has the student violated the honor code?" An affirmative vote represents "a violation," while a negative vote represents "no violation." A determination of a violation shall require a majority vote. In the absence of such a vote, the Panel shall found that no violation has occurred. An abstention shall not be counted as a vote. In the unlikely event that a majority of the Review Panel members do not vote, the current panel shall be dismissed and a new panel shall be convened to re-hear the case.
8. In determining the appropriate sanction, such factors as the referred student's past history of violations, attitude, intent, severity of the violation, and the degree of cooperation may be considered.
9. Recommendations of penalty shall be by majority vote. An abstention shall not be counted as a vote.
10. A recording of the proceedings, the confidential recommendations of the Review Panel, together with all submitted evidence and votes recorded, shall be held in the Chair's confidential file. The Chair shall inform the Dean of the Graduate School (or designee), in writing, of the findings and recommendations of the Review Panel.

ARTICLE VI: UNIVERSITY ACTION

Section 1 - Review and Decision

1. The recommendations (decision of violation, and penalty if required) of the Review Panel shall be submitted in writing by the Chair to the Dean of the Graduate School (or designee) for review and decision.

2. No penalty shall be announced until an official decision has been rendered by the Dean of the Graduate School (or designee).
3. The official decision of the Dean of the Graduate School (or designee) shall be transmitted in writing to the referred, the referrer, and the course instructor (or major professor for a research-related violation). The referred shall also be notified of the right to appeal the decision.
4. When the Review Panel's recommendation is not accepted by the Dean (or designee), the Panel shall be notified of the final decision of the Dean (or designee).

Section 2 - Appeals

1. The referred may appeal the official decision to the Dean of the Graduate School on grounds of (1) failure of the Graduate Honor System to follow proper procedures, (2) introduction of new evidence, and/or (3) severity of the penalty. The imposition of the penalty shall be deferred until the termination of the appeals process.
2. The Dean of the Graduate School must receive the appeal within five (5) University business days after the referred receives written notification of the decision and penalty.
3. In the event of an appeal, the case will be forwarded to an appellate officer, who is well versed in the Graduate Honor System, graduate academic policies, and Virginia Tech standards of ethics and have received training from the Graduate Honor System. Such officers include, but are not limited to, the Director of Undergraduate Academic Integrity, Associate Dean for Professional Programs in the College of Veterinary Medicine, or Associate Vice President for Research Compliance.
4. The appeal is not a retrial and must be focused solely upon one or more of the following: (1) failure of the Graduate Honor System to follow proper procedures, (2) introduction of new evidence, (3) severity of penalty. The appeal shall be limited to the consideration of the specific information pertaining to one or more of the above. The burden shall be placed on the appealing student to demonstrate why the original finding or sanction should be changed.
5. The decision of the appellate officer is limited to the grounds of the appeal. Judgments are made according to the following guidelines:
    a. *Failure of the Graduate Honor System to Follow Proper Procedures*

       Determine whether or not the Graduate Honor System followed proper procedures. If proper procedures were followed, then the official decision is enforced. If proper procedures were not followed, then the referred student is acquitted and the case is closed.

    b. *Introduction of New Evidence*

       Determine whether or not the new evidence is relevant to the official decision. In the event that the information is determined to be relevant, the appellate officer shall inform the Dean of the Graduate School or the Graduate Honor System Advisor that a new Review Panel is requested. The new Review Panel shall have no members from a previous panel. If information is determined to be irrelevant or there is no new evidence, then the original decision is upheld.

c. *Severity of Penalty*

Determine if the penalty is too severe for the violation(s), for which the student was found responsible. The finding of a violation is not appealable and the case will not be reheard. The appellate officer has the option to consult GHS facilitators or experienced panelists who were not involved with the original case, as identified by the Chair or Advisor to the GHS, if perspective on the severity of the penalty is required. In the event that the penalty is found to be too severe, a lower penalty may be determined by the appellate officer from those specified under Article VII of this Constitution.

6. The final determination of an appeal shall be the sole responsibility of the appellate officer. The student shall be notified in writing of the disposition of the appeal.

ARTICLE VII: ACTIONS OF THE GRADUATE HONOR SYSTEM

Section 1 - Penalties

Where a violation is determined, the Review Panel or Facilitated Discussion shall also be responsible for determining an appropriate sanction. There are four major penalty levels (1-4) with increasing severity. These penalties are (1) Graduate Honor System Probation, (2) Suspension in Abeyance, (3) Suspension, and (4) Permanent Dismissal. For each charge of a Graduate Honor Code violation for which a student acknowledges responsibility or is found responsible, one of these four penalties must be given.

For cases resolved through Facilitated Discussion, only penalty 1 (Graduate Honor System Probation), subparts a-f may be applied.

For those cases where suspension or dismissal is not warranted, the subparts of penalty 1 (Graduate Honor System Probation) provide a further gradation in the penalty action. Whereas penalties 2, 3, and 4 must be given as a whole (i.e., no parts may be given without the others), penalty 1 may be given in part or in full. However, *if penalty 1 is selected, parts a and b are required*. Only parts c-i of penalty 1 shall be optional. The very minimum penalty given shall be penalty 1, parts a and b.

1. **Graduate Honor System Probation** (parts a and b mandatory, parts c-h optional)
    a. The referred shall not be suspended from the University, but shall be placed on Graduate Honor System Probation until graduation or termination of enrollment. The sentence of Probation is a warning and is intended to serve as a deterrent against future misconduct. In the event of any other University or Graduate Honor Code violation, the appropriate parties shall be notified of the previous history of the referred. In the event of resignation and re-enrollment within a period of one (1) year, the referred shall be reinstated on Graduate Honor System Probation (penalty 1, part a only) subsequent to re-enrollment.
    b. The referred shall also automatically receive a zero on the assignment on which the violation occurred. In cases other than those involving course work (or other

similar work where a zero is applicable), action shall be taken to negate any advantages obtained by the violation.

c. A record of the action shall be kept in the referred student's folder (*not* the official transcript) in the Graduate School until graduation from the University or termination of enrollment.
d. The referred shall be required to attend a meeting or meetings with the Chair and the Dean of the Graduate School for the purpose of achieving a better understanding on the student's part of the requirements and purpose of the Graduate Honor System. Failure to participate in this meeting(s) shall constitute grounds for the *automatic* invocation of part "g" below.
e. The referred shall be required to write an essay on academic integrity, prevention of academic misconduct, and/or what they have learned regarding academic integrity. Additional essay topics may be requested by the Review Panel. The Chair or Associate Chair from the case will review and guide the writing of the essay. Failure to complete this assignment shall constitute grounds for the *automatic* invocation of part "g" below.
f. The referred shall be required to complete GRAD 5014: Academic Integrity and Plagiarism course. Failure to successfully complete this course shall constitute grounds for the *automatic* invocation of part "g" below.
g. The notation "placed on Graduate Honor System Probation" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.
h. If substantial unfair academic advantage was gained, that is to say, if the violation, undetected, would have led to an advantage over the other students (or if the referred thought it would), then a grade of "F" for the course in which the offense occurred shall also be a penalty action under this part. This grade shall appear on the student's grade report and permanent record (transcript) as an "F."
i. If substantial unfair academic advantage was gained, that is to say, if the violation, undetected, would have led to a substantial grade advantage over the other students (or if the referred thought it would), then a grade of "F for violation of the Graduate Honor Code" for the course in which the offense occurred shall also be a penalty action under this part. This grade shall appear on the student's grade report and permanent record (transcript) as an "F*", and it shall be a permanent notation.

2. **Suspension in Abeyance** (all parts mandatory)
   a. The referred shall be allowed to remain in the University to complete the semester in which the offense occurred or in which the hearing is held.
   b. The penalty shall automatically include a grade of "F for violation of the Graduate Honor Code" for the course (or equivalent) in which the offense occurred. This grade shall appear on the student's grade report and permanent record (transcript) as an "F*", and it shall be a permanent notation.
   c. After the completion of the semester as specified in item (a) above, the referred shall be suspended for a period not to exceed two (2) successive semesters or one (1) full academic year as specified by the official notification of the University action (as specified under Article VI, Section 1, item 3 of this Constitution).

   d. The notation "suspended for violation of the Graduate Honor Code" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.
   e. Upon the referred student's re-enrollment at Virginia Tech at the end of the period of suspension, the student shall be placed on Graduate Honor System Probation (penalty 1, part a only) until graduation or termination of enrollment.
3. **Suspension** (all parts mandatory)
   a. Suspension is immediate and the student shall not be allowed to complete the current semester. In addition, the referred shall be suspended for a period not to exceed two (2) successive academic semesters or one (1) full academic year following the current semester (as specified under Article VI, Section 1, item 3 of this Constitution).
   b. All credits shall be lost for work done during the semester in which the student is currently enrolled. The penalty shall automatically include a grade of "F for violation of the Graduate Honor Code" for the course (or equivalent) in which the offense occurred. This grade shall appear on the student's grade report and permanent record (transcript) as an "F*", and it shall be a permanent notation.
   c. The notation "suspended for violation of the Graduate Honor Code" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.
   d. Upon the referred student's re-enrollment at Virginia Tech at the end of the period of suspension, the student shall be placed on Graduate Honor System Probation (penalty 1, part a only) until graduation or termination of enrollment.
4. **Permanent Dismissal** (all parts mandatory)
   a. The referred shall be permanently dismissed from the University without being allowed to complete the current semester.
   b. All credits shall be lost for work done during the semester in which the student is currently enrolled. In addition, if the offense did not occur during the semester in which the hearing is held, then a grade of "F for violation of the Graduate Honor Code" shall also be assigned for the course in which the offense was committed. This grade shall appear on the student's grade report and permanent record (transcript) as an "F*", and it shall be a permanent notation.
   c. The referred may never re-enroll in the University.
   d. The notation "permanently dismissed for violation of the Graduate Honor Code" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.

Section 2 - Acquittal

In the event of acquittal by the Graduate Honor System, all records of any description in conjunction with the trial shall be completely destroyed, except the "charges" and the "Findings of the System," which shall be filed in the Chair’s confidential file.

Section 3 - Announcement

1. In cases where students are found in (or claim responsibility for) violation of the honor code, the penalty and specifications may be published without names, when the case is resolved, in such media as the GHS annual report and reports to the Graduate Student Assembly or Commission on Graduate Studies and Policies.
2. Exonerations may also be published (without names) if the referred so desires. A written release must be obtained from the referred prior to publication.

ARTICLE VIII: RIGHTS AND OBLIGATIONS OF THE REFERRED STUDENT

Section 1 - Rights of the Referred Student

A student referred for violating the Graduate Honor Code shall have certain procedural guarantees to ensure fair judicial hearing of evidence. These rights under the Graduate Honor Code shall be as follows:

1. Students shall be considered innocent until judged guilty.
2. Students shall have the right to refrain from speaking for or against themselves.
3. Students shall have the right to speak in their own behalf.
4. Students may choose a member of the university community, such as a fellow student, faculty member, or staff member who is willing to assist them in preparing their defense. This person may attend a Facilitated Discussion, but may only participate in an advisory capacity to the student. During a Review Panel, the student's representative shall only be allowed to address the Review Panel; they may not question witnesses. Lawyers retained by referred students shall not be permitted in Review Panel hearings or at Facilitated Discussions.
5. Students may terminate a Facilitated Discussion at any time, without reason.
6. Students shall have the right to review the report prepared by the Associate Chair, prior to the scheduling of a Preliminary Review Panel.
7. Students shall have the right to suggest corrections and/or additions to the report prepared by the Associate Chair, prior to the scheduling of a Preliminary Review Panel. All suggestions will be considered at the discretion of the Chair and the Associate Chair for the case.
8. Students may at any time privately seek counsel with their university community representative. Statements made at this time shall be confidential.
9. Students may have any Graduate Honor System function that they are entitled to attend stopped at any time for a point of clarification.
10. Students may leave any Graduate Honor System function at any time; however, it is in their best interest to remain until they are made aware of all the details.
11. Students shall have the right to receive written notice of the charges, the "Order of Events for Review Panel Hearings," and any other pertinent information sufficiently in advance of the Review Panel hearing and in reasonable enough detail to allow them to prepare a case in their behalf. Likewise, students shall have the right to examine all evidence collected during evidence gathering prior to the Review Panel hearing. The students and their representatives shall have a copy of the evidence during the Review Panel hearing.
12. Students shall have the right to be aware of all testimony.
13. Students shall have the right to face the referrer, when such opportunity exists, at the Review Panel hearing and to present a defense against the charges, including presenting

witnesses on their behalf. Consequently, students shall be consulted in the scheduling of the Review Panel hearing. However, students shall only be allowed to reschedule the Review Panel hearing once. Except under extenuating circumstances, Review Panel hearings shall not be rescheduled unless the Chair or the Graduate Honor System Advisor is notified of the requested change prior to three (3) days preceding the scheduled hearing date.

14. Failure of students to be present at Review Panel hearings, assuming reasonable effort has been made to ensure their presence, shall indicate that they are waiving their rights to face the referrer and to appear before the Review Panel.
15. Students may ask that a panel member be excused from the Review Panel hearing if they can give reasonable cause why that panel member may be biased or have some other conflict of interest. The Chair and the Graduate Honor System Advisor shall make a final ruling on any such request.
16. Students shall have the right to an appeal as specified under Article VI, Section 2.

Section 2 - Obligations of the Referred Student(s)

Students referred of Graduate Honor Code violations shall have the responsibility of cooperating with Graduate Honor System personnel. Furthermore, when a case involves other students, these students' rights to privacy should be observed. Students should be aware that the confidentiality of Honor System proceedings may be covered under the Family Educational Rights and Privacy Act (FERPA) as outlined on the University Registrar’s website.

ARTICLE IX: RIGHTS AND OBLIGATIONS OF THE REFERRER

Section 1 - Rights of the Referrer

A person referring charges of a Graduate Honor Code violation against a graduate student shall be accorded the following rights:

1. Discussion of the charges between the referrer and referred prior to the Review Panel hearing shall be allowed, although the referrer shall have the right to decline to discuss the case with the referred. The referrer shall have the right, with the permission of the referred, to have one witness present when talking with the referred about the alleged violation.
2. The referrer shall have the right to choose one person (any member of the university community, such as a graduate student, a faculty or staff member, or department head) to assist them in preparation of the case. This person is not allowed to be present at the Review Panel hearing or during a Facilitated Discussion.
3. The referrer shall have the right to terminate a Facilitated Discussion at any time, without reason.
4. The referrer shall have the right to review the report prepared by the Associate Chair, prior to the scheduling of a Preliminary Review Panel.
5. The referrer shall have the right to suggest corrections and/or additions to the report prepared by the Associate Chair, prior to the scheduling of a Preliminary Review Panel. The referrer shall have the right to receive a copy of the evidence collected during the evidence gathering, the "Order of Events for Review Panel Hearings," and any other

pertinent information, if the Preliminary Review Panel sends the case to the Review Panel.
6. The referrer shall have the right to receive written notification of the final disposition of the case.
7. The referrer shall have the right to be secure in person and property.
8. Professors referring charges of violations may opt to grade or refrain from grading any assignment referred to the Graduate Honor System. It is recommended that instructors, if they are able to do so, grade the assignment with the assumption that the student is innocent of the charge. However, an incomplete grade may be assigned to the referred student pending the decision of the Graduate Honor System. The incomplete grade will be removed when the case is resolved.

Section 2 - Obligations of the Referrer

A person referring a suspected of a Graduate Honor Code violation shall accept the following obligations:

1. The referrer shall cooperate with the Chair, the Graduate Honor System advisor, the Associate Chair, and any other personnel of the Graduate Honor System.
2. The referrer shall be expected to appear at the Review Panel hearing.
3. The referrer shall have the responsibility of maintaining confidentiality in all matters pertaining to the case. However, referrers may discuss the case with their counsel (see Article IX, Section 1, item 2). The referrer should be aware that the confidentiality of Honor System proceedings may be covered under the Family Educational Rights and Privacy Act (FERPA) as outlined on the University Registrar's website.

ARTICLE X: OBLIGATIONS OF PARTIES INDIRECTLY INVOLVED IN HONOR SYSTEM CASES

1. Parties indirectly involved in Honor System cases include but are not limited to persons who witness alleged violations, witness discussions between referrers and referred students, and serve as members of the University community that help referrers and referred students prepare their case.
2. Parties indirectly involved in Honor System cases shall have the responsibility of maintaining confidentiality in all matters. Parties indirectly involved in Honor System Cases should be aware that the confidentiality of Honor System proceedings may be covered under the Family Educational Rights and Privacy Act (FERPA) as outlined on the University Registrar's website.

ARTICLE XI: GENERAL

Section 1 - Reporting of Violations

It is the obligation of all members of the academic community to report alleged violations of the Graduate Honor Code. *Reporting the observance of a Graduate Honor Code violation shall not be optional; it shall be mandatory.* Reports should be submitted in writing to the Chair or the

Graduate Honor System Advisor on forms provided for that purpose, which are available at the Graduate Honor System website. The report form also may be obtained at the Graduate School.

Alleged violations of the Graduate Honor Code must be reported within ten (10) University business days after the date of discovery. Only under very special circumstances shall exceptions to this policy be granted, and then only at the discretion of the Chair and the Graduate Honor System Advisor. A possible reason for exception could include, but is not limited to, unavoidable delays in obtaining the evidence.

Section 2 - Violations at Extended Campuses

1. Students engaged in graduate studies at any of Virginia Tech's extended campuses shall be subject to all provisions of this Constitution.
2. Designated panelists may assist in gathering evidence if it is not possible for an Associate Chair to do so. The evidence obtained shall be presented to the Preliminary Review Panel and shall be evaluated in a manner prescribed in Article IV of this Constitution.
3. Unless otherwise designated by the Chair, with the approval of the Dean of the Graduate School, all hearings shall be conducted at the Virginia Tech main campus in Blacksburg.

Section 3 - Summer

Because of the decreased availability of graduate student and faculty panelists during the summer, delays in processing and hearing cases may result. Thus, reasonable delays of this sort shall not be considered as violating the student's rights or as grounds for an appeal.

Section 4 - Graduate Students Enrolled in Undergraduate Classes

Graduate students shall be subject to stipulations within this Constitution regardless of whether they are enrolled in undergraduate or graduate classes. In cases in which the graduate student is referred in conjunction with an undergraduate student, the Graduate Honor System will work with the Office of Undergraduate Academic Integrity.

Section 5 - Undergraduate Students Enrolled in Graduate Classes

The undergraduate honor system, commonly referred to as The Virginia Tech Honor System, shall have jurisdiction over cases involving undergraduate students in graduate classes unless the student is also enrolled in the Graduate School and taking graduate classes for graduate credit under the classification of "Dual Student" or " Combined Student," and "Bachelor/Master's Degree Student," in which case the Graduate Honor System shall have jurisdiction. In cases in which an undergraduate student is referred with a graduate student, the Graduate Honor System will work with the Office of Undergraduate Academic Integrity.

Section 6 - Violations Involving Graduate Students Already Graduated

If the degree towards which the student was working at the time of the alleged violation has already been awarded, the case shall be referred to the Dean of the Graduate School who shall

convene a committee to review and investigate the charge and make recommendations. The committee composition shall be determined by the Dean of the Graduate School. The Chair of the Graduate Honor System shall be an ex officio member of this committee and shall have the same voting privileges as the other members of this committee.

Section 7 - Recruitment of Graduate Honor System Members

Recognizing that it is strongest when it fosters and reflects the support of all graduate students and faculty at the University, the Graduate Honor System shall seek to be as broadly representative of the graduate student and faculty bodies at Virginia Tech as possible. To this end, all qualified graduate students and faculty shall be encouraged to participate in the Graduate Honor System. No otherwise qualified graduate student or faculty may be excluded from membership on the basis of race, sex, handicap, age, veteran status, national origin, religion, political affiliation, or sexual orientation.

Section 8 - Clearance of Graduate Student Records

Graduate students volunteering or appointed to serve on the Graduate Honor System must receive clearance of their personal disciplinary records and their academic records through the Dean of the Graduate School. Such clearances shall be conducted consistent with the University's regulations on the confidentiality of records and shall assure a minimum academic quality credit average of 3.00 and no previous or current disciplinary action for each appointee.

Section 9 - Confidentiality

All investigations, hearings, reviews, and other associated activities of the Graduate Honor System shall conform to the University's " Confidentiality of Student Records" and FERPA policies.

Section 10 - Substitution of Graduate Honor System Personnel

The Chair or the Graduate Honor System Advisor shall be authorized, when circumstances dictate, to appoint substitutes for any Graduate Honor System personnel in any case before the Graduate Honor System. However, faculty may not be substituted for graduate students and vice versa.

Section 11 - University Policies

Where appropriate, the Graduate Honor System shall abide by all applicable policies, statements, and principles as contained in the *University Policies for Student Life.*

Section 12 – Definition of a "University business day"

A "University business day," as referred to in this constitution, shall be defined as any day on which the main Virginia Tech campus is open and the Graduate School offices are open.

ARTICLE XII: AMENDMENTS

Proposed amendments to the Constitution of the Graduate Honor System may be initiated through one of the following channels: (1) by a majority vote of the Graduate Student Assembly, (2) by a majority vote of the Commission on Graduate Studies and Policies, or (3) by direct submission to the Chair or the Dean of the Graduate School. Also, at the discretion of the Chair and the Graduate Honor System advisor, amendments may be initiated through the Graduate Honor System. Upon receiving such proposals, the Dean of the Graduate School shall convene the Constitution Revision Committee. With the approval of two-thirds of this committee, proposed amendments shall be forwarded for approval by the Commission on Graduate Studies and Policies and thereafter through the proper channels of the University governance structure (which at the time of the 2008-09 revision is described in Policies and Procedures No. 8011). Any substantive changes in proposed amendments as they proceed through subsequent levels of approval shall be resubmitted to the Constitution Revision Committee for its approval.

The Constitution Revision Committee shall consist of the Chair, the Graduate Honor System Advisor, a minimum of six (6) panelists (minimum of four (4) graduate students and two (2) faculty), and up to two (2) other representatives from the graduate student body to be nominated by the Graduate Student Assembly.

2018 Revision

The Vice President and Dean of the Graduate School convened a Constitution Review Committee in the Spring of 2018. This revision was conducted by a panel of graduate students and faculty members in accordance with the constitution.

The goals of the revision were to address concerns about the path of appeals, update language within the constitution to better fit the Honor System's values, and include penalties that fit the Honor System's values and mission which were not available at the time of the last revision.

2008-09 Revision

At the request of the Dean of the Graduate School, a Constitution Review Committee was convened in 2008 to perform a periodic review to bring the GHS Constitution up to date with current University policies and the climate of the time. This revision was conducted by a panel of graduate students and faculty in accordance with the constitution.

The goals of the current revision were two-fold: First, revisions were intended to address substantive issues that have arisen since the 1991 revision. Second, revisions were intended to improve the efficiency and effectiveness of the Honor System. The Review Committee considered a number of changes and ultimately rejected those that did not meet either of the above mentioned goals. The committee has worked very hard to ensure that the revisions to this constitution stand for at least another 15 years.

1991 Revision

Following the conclusion of the 1987 University Self-Study, a Constitution Revision Committee was convened to evaluate the Graduate Honor System. Since the Constitution had not received serious scrutiny in a decade or more, and since the Graduate Honor System has now matured to a level where the old Constitution is hardly serviceable, the ultimate goal of this committee from the outset was a revision of the Constitution. Much work has gone into ensuring that this revision will stand the test of time and will be instructive in guiding the operation of the Graduate Honor System in the years ahead.

Reference Material Used

Revision of this document was based on a variety of materials; these include:

1. *Constitution to the Virginia Tech [Undergraduate] Honor System, published in the Pylon (1988-89). (Article VII, Article VIII, several sections of Article IX, and Appendix A are used with and without modifications by permission of the Virginia Tech [Undergraduate] Honor System). Also, a report written by the Virginia Tech [Undergraduate] Honor System Self-Study Committee was used.*
2. *The University Judicial System's Manual for Hearing Officers, published by the Dean of Students Office, Virginia Tech (1989).*
3. *Several ideas and sentences from the following sources have been used with and without modification in the writing of the section "Purpose and Description of Graduate Honor Code" (Article I, Section 1):*
    a. *Reference 1.*
    b. *Cornell University Course of Study, "Code of Academic Integrity", (1989-1990), pp. 33-35.*
    c. *Bulletin of Duke University Graduate School, "Standards of Conduct", (March 1990), pp. 56-58.*
    d. *Record of the University of North Carolina at Chapel Hill, The Graduate School, "The Honor Code", (April 1990), pp. 70-72.*
    e. *University of Virginia Graduate Record, "The Honor System", (1987-1988), p.20 and p. 30.*
4. *Information used in defining "Misconduct in Research" (Article I, Section 3):*
    a. *Recommendations on "Research Misconduct and Graduate Students at VPI&SU" submitted to the Constitution Revision Committee by the Degree Requirements, Standards, Criteria and Academic Policies Committee (DRSCAPC) of the Commission on Graduate Studies, January 18, 1990.*
    b. *"Narrower Definition of Misconduct Urged," Public Affairs Newsletter, Federation of American Societies for Experimental Biology, Vol. 21, No. 12 (December 1988) p. 1.*
    c. *Federal Register, Vol. 54, No. 151, (August 8, 1989) 32449.*
    d. *"New Rules on Misconduct," Science, (August 11, 1989) p. 593.*
5. *"Computer Science Department Policy on Koofers, Old Programs, Cheating, and Microcomputer Use," CS Bits & Bytes (CS Dept. VPI&SU), Wednesday, February 15, 1989, pp. 7-8. (Ideas and and wording from this policy were used in Article I, Section 3.)*

CONSTITUTION OF THE GRADUATE HONOR SYSTEM

Virginia Polytechnic Institute and State University

Passed by the Commission on Graduate Studies and Policies

Effective Fall 2009

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ARTICLE I: PURPOSE AND DESCRIPTION

Section 1 - Graduate Honor Code

The Graduate Honor Code establishes a standard of academic integrity. As such, this code demands a firm adherence to a set of values. In particular, the code is founded on the concept of honesty with respect to the intellectual efforts of oneself and others. Compliance with the Graduate Honor Code requires that *all* graduate students exercise honesty and ethical behavior in all their academic pursuits here at Virginia Tech, whether these undertakings pertain to study, course work, research, extension, or teaching.

It is recognized that graduate students have very diverse cultural backgrounds. In light of this, the term *ethical behavior* is defined as conforming to accepted professional standards of conduct, such as codes of ethics used by professional societies in the United States to regulate the manner in which their professions are practiced. The knowledge and practice of ethical behavior shall be the full responsibility of the student. Graduate students may, however, consult with their major professors, department heads, International Graduate Student Services, or the Graduate School for further information on what is expected of them.

More specifically, all graduate students, while being affiliated with Virginia Tech, shall abide by the standards established by Virginia Tech, as these are described in this Constitution. Graduate students, in accepting admission, indicate their willingness to subscribe to and be governed by the Graduate Honor Code and acknowledge the right of the University to establish policies and procedures and to take disciplinary action (including suspension or expulsion) when such action is warranted. Ignorance shall be no excuse for actions which violate the integrity of the academic community.

The fundamental beliefs underlying and reflected in the Graduate Honor Code are that (1) to trust in a person is a positive force in making a person worthy of trust, (2) to study, perform research, and teach in an environment that is free from the inconveniences and injustices caused by any form of intellectual dishonesty is a right of every graduate student, and (3) to live by an Honor System, which places a positive emphasis on honesty as a means of protecting this right, is consistent with, and a contribution to, the University's quest for truth.

Section 2 - Implementation

The Graduate Honor System was established to implement the Graduate Honor Code, and its functions shall be:

1. To promote honesty and ethical behavior in all academic pursuits, including, but not limited to, study, research, teaching, and extension.
2. To disseminate information concerning the Graduate Honor System to all new graduate students, faculty, and other interested parties.
3. To investigate all suspected violations of the Graduate Honor Code in an impartial, thorough, and unbiased manner.
4. To try all cases involving academic infractions of the Graduate Honor Code brought before the System.
5. To assure that the rights of all involved parties are protected and assure due process in all proceedings.

Section 3 - Violations

All forms of academic work including, but not limited to, course work, labwork, thesis or dissertation work, research, teaching, and extension performed by any graduate student enrolled on a part-time or full-time basis under any of the admission categories listed in the Virginia Tech Graduate Catalog shall be subject to the stipulations of the Graduate Honor Code. Violations of the Graduate Honor Code are categorized as follows: Cheating, Plagiarism, Falsification, and Academic Sabotage. Violations are defined as follows:

1. *Cheating:* Cheating is defined as the giving or receiving of any unauthorized aid, assistance, or unfair advantage in any form of academic work. Cheating applies to the products of all forms of academic work. These products include, but are not limited to, in-class tests, take-home tests, lab assignments, problem sets, term papers, research projects, theses, dissertations, preliminary and qualifying examinations given for the fulfillment of graduate degrees, or any other work assigned by an instructor or professor, graduate committee, or department that pertains to graduate work or degrees.

   Any student giving or receiving unauthorized information concerning a test, quiz, or examination shall be guilty of an Honor Code violation. Submitting work that counts towards the student's grade or degree which is not the sole product of that student's individual effort shall be considered cheating, unless, for example, the professor explicitly allows group work, use of out-of-class materials, or other forms of collective or cooperative efforts. In general, all academic work shall be done in accordance with the requirements specified by the instructor or professor. In the absence of specific allowances or instructions by the professor, students shall assume that all work must be done individually.

Some uses of permanently returned, graded material ("koofers") are cheating violations of the Code. By permanently returning graded materials, a faculty member or instructor demonstrates the intent that these materials should be accessible to all students. Such materials may be used for study purposes, such as preparing for tests or other assignments, and other uses explicitly allowed by the professor or course instructor. Once test questions have been handed out, koofers may not be used. Other specific examples of the illegal use of koofers include, but are not limited to, using koofers during closed-book exams, handing in any type of copy (e.g., a photocopy or a transcribed copy) of someone else's work (partial or complete) from a previous term, and copying a current answer key or one that was handed out in a previous term. Students may not copy and hand in as their own work answers taken from any kind of koofer. When in doubt of what may or may not be used, students should consult with the course instructor. In the absence of specific instructions concerning koofers from the instructor, students shall assume that all submitted work must be the product of their own efforts.

2. *Plagiarism:* Plagiarism is a specific form of cheating, and is defined as the copying of the language, structure, idea, and/or thoughts of another and claiming or attempting to imply that it is one's own original work. It also includes the omitting of quotation marks when references are copied directly, improper paraphrasing (see Appendix: Plagiarism, p. 16), or inadequate referencing of sources. Sources used in preparing assignments for classes, theses, dissertations, manuscripts for publication, and other academic work should be documented in the text and in a reference list, or as directed by the instructor or professor. Sources requiring referencing include, but are not limited to, information received from other persons that would not normally be considered common knowledge (Plagiarism), computer programs designed or written by another person, experimental data collected by someone else, graded permanently-returned materials such as term papers or other out-of-class assignments (koofers), as well as published sources. A more detailed discussion of plagiarism may be found at the end of this document under Plagiarism.

3. *Falsification:* Students who falsify, orally, in writing, or via electronic media, any circumstance relevant to their academic work shall be guilty of a violation of this Code. Included are such actions as forgery of official signatures, tampering with official records or documents, fraudulently adding or deleting information on academic documents, fraudulently changing an examination or testing period or due date of an assignment, and the unauthorized accessing of someone else's computer account or files. Violations also include willfully giving an improper grade or neglecting to properly grade submitted material, improperly influencing the results of course evaluations, and knowingly including false data or results in any paper or report submitted for a grade, as a degree requirement, or for publication.

4. *Academic Sabotage:* Academic sabotage is purposeful vandalism directed against any academic endeavor or equipment. It includes, but is not limited to, the destruction or theft of written material, laboratory or field experiments, equipment used in teaching or research, or computer files or programs. Unauthorized tampering with computer programs or systems shall constitute a violation. Academic sabotage includes deliberately crashing or attempting to crash a computer system or the use of files intended to cause or actually causing computer systems to behave atypically, thereby impeding another person's or group's efforts. In particular, knowingly infecting any system with a virus, worm, time bomb, trap door, Trojan horse, or any other kind of invasive program shall be considered a serious violation. Note that violations under this category may also lead to University judicial action or to criminal suits charged by the University.

Misconduct in research and teaching deserves special mention in the Code since it is an area of special interest to graduate students. It is not a separate violation category since it may involve cheating, plagiarism, falsification, and/or academic sabotage as discussed above. *Misconduct in research* does not include those factors intrinsic to the process of research, such as honest error, conflicting data, or differences in interpretation concerning data or experimental design. Likewise, *misconduct in teaching* does not include honest disagreement over the method of presentation of instructional material to a class or in the evaluation of the performance of a student. Research misconduct allegations may also be investigated by the Virginia Tech Office of Research Integrity.

Section 4 - Composition

The Graduate Honor System shall consist of an Advisor, a Chief Justice, one or more Investigators, GHS Facilitators, an Investigative Board, and a Judicial Panel. The Dean (or designee) of the Graduate School shall be responsible for the continued operation of the System. Appointment of Graduate Honor System personnel shall be made in accordance with Article XI, Section 7.

ARTICLE II: GENERAL ADMINISTRATION

Section 1 - Appointment of the Graduate Honor System Advisor

A member of the staff of the Dean of the Graduate School shall be appointed by the President to serve as the Graduate Honor System Advisor. The Advisor shall serve in an advisory capacity to the Chief Justice and shall be present (or represented) at all hearings of both the Investigative Board and the Judicial Panel.

Section 2 - Duties and Functions of the Advisor

The following duties and functions shall be performed by the Advisor:

1. The advisor shall have the responsibility to train the Chief Justice, Investigators, Facilitators, and new board and panel members.
2. The advisor shall provide counsel to the Chief Justice and Investigators in the preparation of cases.
3. The advisor shall provide staff for handling training sessions, scheduling meetings, and other matters related to the administration of the Graduate Honor System.
4. The advisor shall counsel faculty or students referring cases as well as those students charged with offenses.
5. The advisor (or designee) shall attend all hearings.
6. The advisor, in consultation with the Chief Justice, shall be responsible for appointing the Investigators.
7. The advisor, upon the receiving the recommendation of the Chief Justice, shall be responsible for approving the membership of the Investigative Board and Judicial Panel.

Section 3 - Appointment of the Chief Justice

1. Nominations for the position of Chief Justice shall be accepted from the Graduate Student Assembly, College Deans, and other members of the academic community, and applications by qualified persons shall be welcomed. Candidates for the position of Chief Justice must be graduate students in good standing and must have been in residence for at least one (1) semester immediately preceding nomination. Preferably, the nominee will have served as an Investigator or as a graduate student panel member of the Graduate Honor Court for at least one (1) semester prior to appointment.
2. The term of office shall be one (1) year, but if available and willing, the current Chief Justice may be re-appointed by the President of the University to serve subsequent terms, up to four (4) years, upon the recommendation of the Graduate Honor System Advisor.
3. The Chief Justice Nominating Committee shall be convened by the Dean upon the resignation of the current Chief Justice, upon completion of term of office, or upon termination of office. This committee shall consist of the Graduate Honor System Advisor (Chair), up to three (3) graduate student members of the Graduate Honor System, and one (1) faculty member having previously served on the Judicial Panel and appointed by the Dean of the Graduate School. All members shall have equal voting privileges. The function of this committee shall be to nominate a candidate for appointment by the President. The nomination process shall be: (1) to invite nominations and accept applications, (2) to review applications and conduct interviews with applicants, and (3) to recommend to the President of the University from among these applicants a nominee for the position of Chief Justice. The recommendation of this committee shall be by majority vote.
4. The recommendation of the nominating committee is voted on by the Graduate Student Assembly (GSA) and the Commission on Graduate Studies and Policies (CGS&P).
5. The Dean of the Graduate School will forward the nomination to the President conveying the vote of the GSA and CGS&P.
6. The President shall appoint the Chief Justice.
7. In the absence of a timely appointment, the President through the recommendation of the Dean, can appoint the nominee as an interim Chief Justice until the conclusion of the appointment process.

Section 4 - Duties and Functions of the Chief Justice

The Chief Justice shall perform the following duties and functions:

1. The Chief Justice shall receive reports of suspected violations and determine, in consultation with the GHS Advisor, if the accused student is eligible for a Facilitated Discussion.
2. The Chief Justice shall assign to the Investigative Board all cases not eligible for Facilitated Discussion.
3. The Chief Justice shall preside at all Judicial Panel hearings. The Chief Justice may request a member of the Judicial Panel to preside in his or her place.
4. The Chief Justice shall assure justice, fairness, and due process.
5. The Chief Justice shall secure nominations and select graduate student and faculty members for the Facilitated Discussion Process, the Investigative Board, and Judicial Panel, subject to approval by the Graduate Honor System Advisor.
6. The Chief Justice shall assume responsibility for the instruction and training of graduate student and

faculty members in the operation, function, and responsibility of the Graduate Honor System.
7. The Chief Justice shall orient entering graduate students and new faculty to the values and obligations of the Graduate Honor Code.
8. The Chief Justice shall conduct information activities and coordinate activities of the Graduate Honor System.
9. The Chief Justice shall administer the operation of the Graduate Honor System throughout the entire calendar year.
10. The Chief Justice shall keep the graduate community apprised of relevant activities of the Graduate Honor System.
11. The Chief Justice shall consult with the Graduate Honor System Advisor in the appointment of the Investigators and Graduate Honor System panelists for the Facilitated Discussion.
12. The Chief Justice shall select the Judicial Panel subcommittees to hear the cases.

Section 5 - Staff of the Chief Justice

The Chief Justice, with the approval of the Graduate Honor System Advisor, shall appoint sufficient staff to assist with the duties of the office.

Section 6 - Appointment of Investigators

1. The Graduate Honor System Advisor, in consultation with the Chief Justice, shall appoint one or more Investigators. Nominations for this position shall be accepted from the Graduate Student Assembly, College Deans, and other members of the academic community; and applications from qualified personnel shall be welcomed. Members of the Investigative Panel will be invited to apply. Students being considered for Investigator positions must be graduate students in good standing and must have been in residence for at least one (1) semester immediately preceding appointment. Preferably, the nominee will have served as a graduate student panel member of the Graduate Honor System for at least one (1) semester prior to the appointment. Investigators shall serve a one (1) year term but may be re-appointed to serve subsequent terms, up to four (4) years, if available and willing.
2. The appointment of the new Investigator(s) shall be made upon the resignation of the current Investigator(s), upon completion of term of office, or upon termination of office.

Section 7 - Duties of Investigators

Investigators shall perform the following duties:

1. Investigators shall gather evidence and conduct interviews with the referrer and the accused student(s).
2. Investigators shall prepare a brief report summarizing the evidence.
3. Investigators shall present the report summarizing the evidence to the referrer, accused student, and Chief Justice before presenting it for review by the Investigative Board.
4. Investigators shall select the Investigative Board subcommittee for reviewing the evidence.
5. Investigators shall convene and chair Investigative Board meetings.
6. Investigators shall prepare a brief report for the Chief Justice which summarizes the decision of the Investigative Board and shall brief the Chief Justice on all the details of the case at hand.
7. Investigators shall present the evidence before the Judicial Panel.
8. Investigators shall aid the Chief Justice in convening and conducting training sessions for Investigative Board members.

Section 8 – Appointment of Graduate Honor System Facilitators

1. The Graduate Honor System Advisor, in consultation with the Chief Justice, shall appoint one or more Graduate Honor System Facilitators. Applications for this position shall only be taken from current members of the Investigative Board and Judicial Panel. Graduate Honor System Facilitators must have significant experience with the Graduate Honor System as determined by the Graduate Honor System Advisor and Chief Justice before appointment as Discussion Facilitators. Facilitators shall serve a one (1) year term but may be re-appointed to serve subsequent terms, up to four (4) years, if available and willing.
2. The appointment of new Facilitators shall be made as necessary to meet the needs of the Honor System.

Section 9 – Duties of Graduate Honor System Facilitators

1. Graduate Honor System Facilitators shall facilitate a discussion meeting between the referrer, and the accused student(s).
2. Graduate Honor System Facilitators shall ensure that all applicable GHS guidelines are observed and followed.
3. Graduate Honor System Facilitators shall ensure that the rights of the accused and referrer are upheld.
4. Graduate Honor System Facilitators shall, upon examination of the facts of the case, have the authority to refer cases to the Chief Justice so that they may be assigned an Investigator.

5. Graduate Honor System Facilitators shall prepare a full report for the Chief Justice which summarizes the outcome of the facilitated discussion and shall brief the Chief Justice on all the details of the case at hand.
6. Graduate Honor System Facilitators shall aid the Chief Justice in conducting training session for new Graduate Honor System Facilitators.

ARTICLE III: FACILITATED DISCUSSION

Section 1 - Composition

1. The Facilitated Discussion shall be attended by the referrer(s) of the case, the accused student(s), and one Graduate Honor System Facilitator (as outlined in Article II, Sections 8 and 9).

Section 2 – Functions of the Facilitated Discussion

The Facilitated Discussion shall fulfill the following functions:

1. It shall assure that the rights of the accused and the referrer are protected and assure due process.
2. It shall facilitate a discussion between the referrer and accused student(s).
3. It shall attempt to build a consensus resolution to a suspected Honor Code violation without convening an Investigative Board or a Judicial Panel.
4. It shall create a record of an Honor Code violation if all parties conclude that a violation did occur. This record shall be kept in the Graduate Honor System case files.

Section 3 – Eligibility for the Facilitated Discussion

A suspected Honor Code violation will be eligible for a Facilitated Discussion if **ALL** of the following criteria are met:

1. The referrer of the case is a Faculty member;
2. The suspected violation involves an allegation of either 1) cheating or 2) plagiarism as outlined in Article I, Section 3 of the GHS Constitution;
3. The accused student(s) is(are) not on Graduate Honor System Probation at the time the report of the suspected violation is received by the Graduate Honor System;
4. And the violation is one for which a reasonable person who is familiar with the form and functions of the Graduate Honor System would not assign a penalty of more than the sanctions outlined in Article VII, Section 1, Item 1, Part a-d of this Constitution.

Section 4 – Operation

1. The Chief Justice, after determining a case eligible for a Facilitated Discussion, will notify the referrer and the accused of this determination.
2. The referrer and accused will then have no more than ten (10) University business days to notify the Chief Justice of their desire to participate in a Facilitated Discussion; otherwise the case will be sent for investigation and panel review. Exceptions to the ten-day period will only be made under extenuating circumstances, as determined by the Chief Justice or Graduate Honor System Advisor.
3. If either the referrer or the accused student(s) does not agree to participate in the Facilitated Discussion, the case will be sent for investigation and panel review.
4. During the Facilitated Discussion, the referrer of the alleged violation and the accused student will attempt to reach a resolution to the case, with the assistance of the Graduate Honor System Facilitator. The question which the accused and the referrer must answer is "Is the student guilty of the alleged violation?" A determination of guilt shall require both the referrer and the accused student to agree that the student is guilty of the alleged violation. A determination of not guilty shall require both the referrer and the accused student to agree that the student is not guilty of the alleged violation. In the absence of such an agreement, the case shall be sent for an investigation and panel review.
5. If the referrer and student agree that the student is guilty of the alleged violation, the referrer and student may then decide upon an appropriate penalty. Sanctions for the Facilitated Discussion will be limited to those sanctions outlined in Article VII, Section 1, Item 1, Parts a-d of this Constitution. The referrer and accused must both come to an agreement on the appropriate penalty. In the absence of such an agreement, the case shall be sent for an investigation and panel review.
6. The GHS Facilitator shall keep a record of the outcome of the Facilitated Discussion. This record, the original report of the alleged violation, and any relevant evidence shall be held in the Chief Justice's confidential file. The Chief Justice shall inform the Dean of the Graduate School (or designee), in writing, of the outcome of all Facilitated Discussions.
7. For cases in which the referrer or the accused withdraws from the Facilitated Discussion, no record shall be kept that either the referrer or accused participated in a Facilitated Discussion and the fact that they did participate in such a proceeding shall not be deemed relevant in any future Honor System proceedings.

Section 5 – Withdrawal from the Decision of the Facilitated Discussion

1. The accused or referrer may withdraw from a decision reached during a Facilitated Discussion for any reason.
2. If the accused or referrer wishes to withdraw from the Facilitated Discussion decision, the Chief Justice must be notified of the desire to withdraw from the decision within two (2) calendar days of the conclusion of the Facilitated Discussion.
3. If the accused or referrer withdraws from the Facilitated Discussion decision, the case shall be immediately sent for an investigation and panel review.
4. In these instances no record shall be kept that the Facilitated Discussion occurred and the fact that they did participate in such a proceeding shall not be deemed relevant in any future Honor System proceedings.

ARTICLE IV: INVESTIGATIVE BOARD

Section 1 – Investigative Board Waiver

1. The accused student(s) and referrer shall have the opportunity to review the report prepared by the Investigator, before it is presented to an Investigative Board.
2. If, after review of the materials presented in the report, the accused student(s) accepts that there is substantive evidence to support the charge and warrant a full hearing of the case by the Judicial Panel, the student may request an Investigative Board Waiver. This request must be submitted to the Chief Justice within five (5) University business days of the student(s) receiving the case packet.
3. A request for an Investigative Board Waiver must be received before an Investigative Board is scheduled.
4. A request for an Investigative Board Waiver does not, in any way, imply guilt on the part of the student(s).
5. In cases involving multiple accused students, if all accused students do not request an Investigative Board Waiver, the case will proceed to an Investigative Board.
6. Cases for which an Investigative Board waiver is granted shall proceed directly to a Judicial Panel for a hearing.

Section 2 - Composition

1. The Investigative Board shall consist of a minimum of one (1) graduate student from each College, a minimum of one (1) faculty member from each College, one or more Investigators, and the Graduate Honor System Advisor.
2. Student members shall be selected by the Chief Justice upon consultation with the College Deans and the Graduate Student Assembly and shall be approved by the Graduate Honor System Advisor. The term of office shall be one (1) year, from the date of the appointment. If available and willing, students may be re-appointed to serve subsequent terms, up to four (4) years.
3. Faculty members shall be selected by the Chief Justice upon consultation with the College Deans and shall be approved by the Graduate Honor System Advisor. The term of office shall be two (2) years from the date of the appointment. If available and willing, faculty may be re-appointed to serve subsequent terms, up to four (4) years.
4. Graduate student members of the Investigative Board shall have full voting privileges, whereas the faculty members shall serve in an advisory capacity to the student members and shall not have voting privileges.
5. The Investigators (or designees) shall chair Investigative Board meetings and shall not have voting privileges.
6. The Graduate Honor System Advisor shall be a non-voting member and shall serve in an advisory capacity to the Investigator and the Investigative Board.

Section 3 - Functions of the Investigative Board

The Investigative Board shall perform the following functions:

1. It shall gather and evaluate evidence.
2. It shall decide whether a hearing before the Judicial Panel should be held.
3. It shall select an individual from its membership to present the evidence before the Judicial Panel. This normally will be the Investigator, but it may be any member present at the Investigative Board meeting.

Section 4 - Operation

1. For each case without an Investigative Board Waiver, a hearing shall be conducted by a subcommittee of the Investigative Board, consisting of a minimum of five (5) graduate students and at least two (2) faculty members, to be selected by the Chief Justice. The Investigator managing the case shall serve as chair. In addition, the Graduate Honor System Advisor shall be a non-voting member and shall serve in an advisory capacity to the Investigator and the Investigative Board.
2. Investigations shall adhere to the basic tenets of due process for an academic honor violation as outlined in *University Policies for Student Life.**

3. A decision to send the case to the Judicial Panel should be based upon substantive evidence to support the charge. The lack of such evidence should lead the Investigative Board to vote against sending the case to the Judicial Panel and consequently lead to the termination of the proceedings. Otherwise, the Investigative Board should send the case forward for the further scrutiny of the Judicial Panel. The fact that the case is forwarded to the Judicial Panel shall in no way imply guilt; the Investigative Board is simply stating that the case should be reviewed with the aid of personal testimonies.
4. The student members shall have full voting privileges while the faculty members serve in an advisory capacity. Recommendations of the Investigative Board must be by majority vote of the graduate student members present. In the event of a tie vote, the case will go forward.

* "Provisions for Procedural Guarantees," The University Judicial System, *University Policies for Student Life*, Virginia Tech.

ARTICLE V: JUDICIAL PANEL

Section 1 - Composition

1. The Judicial Panel shall consist of a minimum of one (1) graduate student from each College, a minimum of one (1) faculty member from each College, the Chief Justice, and the Graduate Honor System Advisor.
2. Graduate student members shall be selected by the Chief Justice upon consultation with the College Deans and the Graduate Student Assembly and shall be approved by the Graduate Honor System Advisor. The term of office shall be one (1) year from the time of the appointment. If available and willing, students may be re-appointed to serve subsequent terms, up to four (4) years.
3. Faculty members shall be selected by the Chief Justice upon consultation with the College Deans and shall be approved by the Graduate Honor System Advisor. The term of office shall be two (2) years from the time of the appointment. If available and willing, faculty may be reappointed to serve subsequent terms, up to four (4) years.
4. Both graduate student and faculty members of the Judicial Panel shall have full voting rights.
5. The Chief Justice (or designee) shall be a non-voting member and shall serve as the panel moderator.
6. The Graduate Honor System Advisor shall be a non-voting member and shall serve in an advisory capacity to the Chief Justice and the Judicial Panel.

Section 2 - Functions of the Judicial Panel

The Judicial Panel shall perform the following functions:

1. It shall hear evidence gathered by the Investigative Board.
2. It shall hear testimony of the referrer, accused, and witnesses.
3. It shall hear the remarks of the University community representative of the accused.
4. It shall assure that the rights of the accused and the referrer are protected and assure due process.
5. It shall determine guilt or innocence.
6. It shall recommend the penalty when the accused is determined to be guilty of the charge.

Section 3 - Operation

1. For each case, a hearing shall be conducted by a subcommittee of the Judicial Panel, consisting of the Chief Justice, a minimum of four (4) graduate students, a minimum of three (3) faculty members, and the Graduate Honor System Advisor. The number of voting faculty shall not exceed the number of voting graduate students present. The graduate students and faculty members shall be selected by the Chief Justice with the approval of the Graduate Honor System Advisor. Each graduate student and faculty member shall have full voting privileges, while the Chief Justice (or designee) shall be a non-voting member and shall serve as the moderator of the hearing. In addition, the Graduate Honor System Advisor shall be a non-voting member and shall serve in an Advisory capacity to the Chief Justice and the Judicial Panel.
2. All Judicial Panel hearings shall adhere to the basic tenets of due process of an academic honor violation as outlined in *University Policies for Student Life.*
3. All persons involved with the hearing have the right to be treated with respect. Persons displaying disrespect for another person at the hearing or contempt for the proceedings shall be dismissed, and the hearing shall be concluded in their absence.
4. All evidence regarding cases should be submitted to the Investigators during the investigation and interviewing process (prior to the Investigative Board meeting). If additional information is submitted after the case is sent forward by the Investigative Board, the Judicial Panel will decide the relevancy of that information.
5. The accused must be adjudged guilty before any consideration is given to the penalty, unless the accused pleads guilty, in which case the deliberations shall focus solely on the penalty.
6. In evaluating evidence and testimony regarding guilt or innocence, each member of the Judicial Panel shall consider whether or not there exists substantive evidence of guilt. The verdict of guilt or innocence

shall be determined solely on the basis of the facts regarding the charge, i.e., based on evidence collected and testimony presented at the Judicial Panel hearing.

7. At the conclusion of the deliberations on guilt or innocence for each charge against the student the Chief Justice shall poll the members of the Panel on the question: "Is the student guilty of the alleged violation?" An affirmative vote represents "guilty," while a negative vote represents "not guilty." A determination of guilt shall require a majority vote. In the absence of such a vote, the Panel shall be deemed to have found the student "not guilty." An abstention shall not be counted as a vote. In the unlikely event that a majority of the Judicial Panel members do not vote, then the current panel shall be dismissed and a new panel shall be convened to re-hear the case.
8. In determining the appropriate sanction, such factors as the accused student's past history of violations, attitude, intent, severity of the violation, and the degree of cooperation may be considered.
9. Recommendations of penalty shall be by majority vote. An abstention shall not be counted as a vote.
10. A taped recording of the proceedings, the confidential recommendations of the Judicial Panel, together with all submitted evidence and votes recorded, shall be held in the Chief Justice's confidential file. The Chief Justice shall inform the Dean of the Graduate School (or designee), in writing, of the findings and recommendations of the Judicial Panel.

ARTICLE VI: UNIVERSITY ACTION

Section 1 - Review and Decision

1. The recommendations (verdict, and penalty if required) of the Judicial Panel shall be submitted in writing by the Chief Justice to the Dean of the Graduate School (or designee) for review and decision.
2. No penalty shall be announced until an official decision shall have been rendered by the Dean of the Graduate School (or designee).
3. The official decision of the Dean of the Graduate School (or designee) shall be transmitted in writing to the accused, the referrer, and the course instructor (or major professor for a research-related violation). The accused shall also be notified of the right to appeal the decision.
4. When the Judicial Panel's recommendation is not accepted by the Dean (or designee), the Panel shall be notified of the final decision of the Dean (or designee).

Section 2 - Appeals

1. The accused may appeal the official decision to the Dean of the Graduate School on grounds of (1) failure of the Graduate Honor System to follow proper procedures, (2) introduction of new evidence, and/or (3) severity of the penalty. The imposition of the penalty shall be deferred until the termination of the appeals process.
2. The Dean of the Graduate School must be notified of an intention to appeal within five (5) University business days after the accused receives written notification of the verdict and penalty.
3. In the event of an appeal, the Dean of the Graduate School (or designee) shall convene an Appeals Board. The Board shall consist of two (2) members [one (1) graduate student and one (1) faculty] from the Commission on Graduate Studies and Policies and one (1) faculty and one (1) graduate student representative selected at large. The members of the Appeals Board shall be appointed by the Dean of the Graduate School. When convened, the Board shall serve in an advisory capacity and the Dean of the Graduate School shall preside.
4. The accused and the University community representative of the accused may present the argument of the defense before the Appeals Board. The case of the Graduate Honor System shall be presented by one (1) graduate student and one (1) faculty member, both selected by the Chief Justice, who were members of the Judicial Panel that considered the case. The Chief Justice and the Graduate Honor System advisor shall normally present the case findings of the Graduate Honor System.
5. The appeals hearing is not a retrial and must be focused solely upon one or more of the following: (1) failure of the Graduate Honor System to follow proper procedures, (2) introduction of new evidence, (3) severity of penalty. The hearing shall be limited to the consideration of the specific information pertaining to one or more of the above. The burden shall be placed on the appealing student to demonstrate why the original finding or sanction should be changed.
6. The decision of the appeals committee is limited to grounds of the appeal. Judgments are made according to the following guidelines:

   a. *Failure of the Graduate Honor System to Follow Proper Procedures:* Determine whether or not the Graduate Honor System followed proper procedures. If proper procedures were followed, then the official decision is enforced. If proper procedures were not followed, then the student is acquitted and the case is closed.

   b. *Introduction of New Evidence:* Determine whether or not the new evidence is relevant to the official

decision. In the event that the information is determined to be relevant, the appeals board would request a new judicial panel hearing with no members from a previous panel. If information is determined to be irrelevant, then the official decision is upheld.

c. *Severity of Penalty:* Determine if the penalty is too severe for the violations of which the student was found guilty. The finding of guilt is not appealable and the case will not be retried. In the event that the penalty is found to be too severe, a lower penalty may be given from those specified under Article VII of this Constitution.

7. The final determination of an appeal shall be the sole responsibility of the Dean (or designee) of the Graduate School. The student shall be notified in writing of the disposition of the appeal.

ARTICLE VII: ACTIONS OF THE GRADUATE HONOR SYSTEM

Section 1 - Penalties

Where guilt is determined, the Judicial Panel or Facilitated Discussion shall also be responsible for determining an appropriate sanction. There are four major penalty levels (1-4) with increasing severity. These penalties are (1) Graduate Honor System Probation, (2) Suspension in Abeyance, (3) Suspension, and (4) Permanent Dismissal. For each charge of a Graduate Honor Code violation for which a student is found (or pleads) guilty, one of these four penalties must be given.

For cases resolved through Facilitated Discussion, only penalty 1 (Graduate Honor System Probation), subparts a-d may be applied.

For those cases where suspension or dismissal is not warranted, the subparts of penalty 1 (Graduate Honor System Probation) provide a further gradation in the penalty action. Whereas penalties 2, 3, and 4 must be given as a whole (i.e., no parts may be given without the others), penalty 1 may be given in part or in full. However, *if penalty 1 is selected, parts a and b must always be given*. Only parts c-h of penalty 1 shall be optional. The very minimum penalty given shall be penalty 1, parts a and b.

1. **Graduate Honor System Probation** (parts a and b mandatory, parts c-h optional)

a. The accused shall not be suspended from the University, but shall be placed on Graduate Honor System Probation until graduation or termination of enrollment. The sentence of Probation is a warning and is intended to serve as a deterrent against future misconduct. In the event of any other University or Graduate Honor Code violation, the appropriate parties shall be notified of the previous history of the accused. In the event of resignation and re-enrollment within a period of one (1) year, the accused shall be reinstated on Graduate Honor System Probation (penalty 1, part a only) subsequent to re-enrollment.

b. The accused shall also automatically receive a zero on the assignment on which the violation occurred. In cases other than those involving course work (or other similar work where a zero is applicable), action shall be taken to negate any advantages obtained by the violation.

c. A record of the action shall be kept in the accused's folder (*not* the official transcript) in the Graduate School until graduation from the University or termination of enrollment.

d. The accused shall be required to attend a meeting or meetings with the Chief Justice and the Dean of the Graduate School for the purpose of achieving a better understanding on the student’s part of the requirements and purpose of the Graduate Honor System. Failure to participate in this meeting(s) shall constitute grounds for the *automatic* invocation of part "f" below.

e. The accused may be sanctioned to perform an appropriate number of hours (not to exceed 50) of service to the home academic department or other appropriate entities within the university. Failure to perform this service as specified by the Graduate Honor System shall constitute grounds for the *automatic* invocation of part "f" below.

f. The notation "placed on Graduate Honor System Probation" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.

g. If substantial unfair academic advantage was gained, that is to say, if the violation, undetected, would have led to an advantage over the other students (or if the accused thought it would), then a grade of "F# for violation of the Graduate Honor Code" for the course in which the offense occurred shall also be a penalty action under this part. This grade shall appear on the student's grade report and permanent record (transcript) as an "F#." The notation of “#” may be removed by either the student’s graduation

or if the student re-takes the course.

h. If substantial unfair academic advantage was gained, that is to say, if the violation, undetected, would have led to a substantial grade advantage over the other students (or if the accused thought it would), then a grade of "F for violation of the Graduate Honor Code" for the course in which the offense occurred shall also be a penalty action under this part. This grade shall appear on the student's grade report and permanent record (transcript) as an "F*", and it shall be a permanent notation.

2. **Suspension in Abeyance** (all parts mandatory)

a. The accused shall be allowed to remain in the University to complete the semester in which the offense occurred or in which the hearing is held.

b. The penalty shall automatically include a grade of "F for violation of the Graduate Honor Code" for the course (or equivalent) in which the offense occurred. This grade shall appear on the student's grade report and permanent record (transcript) as an "F*", and it shall be a permanent notation.

c. After the completion of the semester as specified in item (a) above, the accused shall be suspended for a period not to exceed two (2) successive semesters or one (1) full academic year as specified by the official notification of the University action (as specified under Article VI, Section 1, item 3 of this Constitution).

d. The notation "suspended for violation of the Graduate Honor Code" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.

e. Upon the accused's re-enrollment at Virginia Tech at the end of the period of suspension, the student shall be placed on Graduate Honor System Probation (penalty 1, part a only) until graduation or termination of enrollment.

3. **Suspension** (all parts mandatory)

a. Suspension is immediate and the student shall not be allowed to complete the current semester. In addition, the accused shall be suspended for a period not to exceed two (2) successive academic semesters or one (1) full academic year following the current semester (as specified under Article VI, Section 1, item 3 of this Constitution).

b. All credits shall be lost for work done during the semester in which the student is currently enrolled. The penalty shall automatically include a grade of "F for violation of the Graduate Honor Code" for the course (or equivalent) in which the offense occurred. This grade shall appear on the student's grade report and permanent record (transcript) as an "F*", and it shall be a permanent notation.

c. The notation "suspended for violation of the Graduate Honor Code" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.

d. Upon the accused's re-enrollment at Virginia Tech at the end of the period of suspension, the student shall be placed on Graduate Honor System Probation (penalty 1, part a only) until graduation or termination of enrollment.

4. **Permanent Dismissal** (all parts mandatory)

a. The accused shall be permanently dismissed from the University without being allowed to complete the current semester.

b. All credits shall be lost for work done during the semester in which the student is currently enrolled. In addition, if the offense did not occur during the semester in which the hearing is held, then a grade of "F for violation of the Graduate Honor Code" shall also be assigned for the course in which the offense was committed. This grade shall appear on the student's grade report and permanent record (transcript) as an "F*", and it shall be a permanent notation.

c. The accused may never re-enroll in the University.

d. The notation "permanently dismissed for violation of the Graduate Honor Code" shall appear on the student's permanent record (transcript) under the semester in which the violation occurred.

Section 2 - Acquittal

In the event of acquittal by the Graduate Honor System, all records of any description in conjunction with the trial shall be completely destroyed, except the "charges" and the "Findings of the System," which shall be filed in the Chief Justice's confidential file.

Section 3 - Announcement

In cases where students are found (or plead) guilty, the penalty and specifications may be published without names when the case is resolved, in such media as the *Collegiate Times* or the GHS annual report. Exonerations may also be published (without names) if the accused so desires. A written release must be obtained from the accused prior to publication.

ARTICLE VIII: RIGHTS AND OBLIGATIONS OF THE ACCUSED

Section 1 - Rights of the Accused

A student accused of violating the Graduate Honor Code shall have certain procedural guarantees to ensure fair judicial hearing of evidence. These rights under the Graduate Honor Code shall be as follows:

1. Students shall be considered innocent until judged guilty.
2. Students shall have the right to refrain from speaking for or against themselves.
3. Students shall have the right to speak in their own behalf.
4. Students may choose a member of the university community, such as a fellow student, faculty member, or staff member who is willing to assist them in preparing their defense. This person may attend a Facilitated Discussion, but may only participate in an advisory capacity to the student. During a Judicial Panel, the student's representative shall only be allowed to address the Judicial Panel; they may not question witnesses. Lawyers retained by accused students shall not be permitted in Judicial Panel hearings or at Facilitated Discussions.
5. Students may terminate a Facilitated Discussion at any time, without reason.
6. Students shall have the right to review the report prepared by the Investigator, prior to the scheduling of an Investigative Board.
7. Students shall have the right to suggest corrections and/or additions to the report prepared by the Investigator, prior to the scheduling of an Investigative Board. All suggestions will be considered at the discretion of the Chief Justice and the Investigator for the case.
8. Students may at any time privately seek counsel with their university community representative. Statements made at this time shall be confidential.
9. Students may have any Graduate Honor System function that they are entitled to attend stopped at any time for a point of clarification.
10. Students may leave any Graduate Honor System function at any time; however, it is in their best interest to remain until they are made aware of all the details.
11. Students shall have the right to receive written notice of the charges, the "Order of Events for Judicial Panel Hearings," and any other pertinent information sufficiently in advance of the Judicial Panel hearing and in reasonable enough detail to allow them to prepare a case in their behalf. Likewise, students shall have the right to examine all evidence collected during the investigation prior to the Judicial Panel hearing. The students and their representatives shall have a copy of the evidence during the Judicial Panel hearing.
12. Students shall have the right to be aware of all testimony.
13. Students shall have the right to face the referrer, when such opportunity exists, at the Judicial Panel hearing and to present a defense against the charges, including presenting witnesses on their behalf. Consequently, students shall be consulted in the scheduling of the Judicial Panel hearing. However, students shall only be allowed to reschedule the Judicial Panel hearing once. Except under extenuating circumstances, Judicial Panel hearings shall not be rescheduled unless the Chief Justice or the Graduate Honor System Advisor is notified of the requested change prior to three (3) days preceding the scheduled hearing date.
14. Failure of students to be present at Judicial Panel hearings, assuming reasonable effort has been made to ensure their presence, shall indicate that they are waiving their rights to face the referrer and to appear before the Judicial Panel.
15. Students may ask that a panel member be excused from the Judicial Panel hearing if they can give reasonable cause why that panel member may be biased or have some other conflict of interest. The Chief Justice and the Graduate Honor System Advisor shall make a final ruling on any such request.
16. Students shall have the right to an appeal as specified under Article VI, Section 2.

Section 2 - Obligations of the Accused

Students accused of Graduate Honor Code violations shall have the responsibility of cooperating with Graduate Honor System personnel. Furthermore, when a case involves other students, these students' rights to privacy should be observed. Students should be aware that the confidentiality of Honor System proceedings may be covered under the Family Educational Rights and Privacy Act (FERPA) as outlined on the University Registrar's website at http://www.registrar.vt.edu/records/ferpa.php.

ARTICLE IX: RIGHTS AND OBLIGATIONS OF THE REFERRER

Section 1 - Rights of the Referrer

A person referring charges of a Graduate Honor Code violation against a graduate student shall be accorded the following rights:

1. Discussion of the charges between the referrer and accused prior to the Judicial Panel hearing shall be allowed, although the referrer shall have the right to decline to discuss the charge with the accused. The referrer shall have the right, with the permission of the accused, to have one witness present when talking with the accused about the alleged violation.
2. The referrer shall have the right to choose one person (any member of the university community, such as a graduate student, a faculty or staff member, or department head) to assist them in preparation of the case. This person is not allowed to be present at the Judicial Panel hearing or during a Facilitated Discussion.
3. The referrer shall have the right to terminate a Facilitated Discussion at any time, without reason.
4. The referrer shall have the right to review the report prepared by the Investigator, prior to the scheduling of an Investigative Board.
5. The referrer shall have the right to suggest corrections and/or additions to the report prepared by the Investigator, prior to the scheduling of an Investigative Board. The referrer shall have the right to receive a copy of the evidence collected during the investigation, the "Order of Events for Judicial Panel Hearings," and any other pertinent information, if the Investigative Board sends the case to the Judicial Panel.
6. The referrer shall have the right to receive written notification of the final disposition of the case.
7. The referrer shall have the right to be secure in person and property.
8. Professors referring charges of violations may opt to grade or refrain from grading any assignment under investigation by the Graduate Honor System. It is recommended that instructors, if they are able to do so, grade the assignment with the assumption that the student is innocent of the charge. However, an incomplete grade may be assigned to the accused student pending the decision of the Graduate Honor System. The incomplete grade will be removed when the case is resolved.

Section 2 - Obligations of the Referrer

A person bringing charges of a Graduate Honor Code violation against another shall accept the following obligations:

1. The referrer shall cooperate with the Chief Justice, the Graduate Honor System advisor, the Investigator, and any other personnel of the Graduate Honor System.
2. The referrer shall be expected to appear at the Judicial Panel hearing.
3. The referrer shall have the responsibility of maintaining confidentiality in all matters pertaining to the case. However, referrers may discuss the case with their counsel (see Article IX, Section 1, item 2). The referrer should be aware that the confidentiality of Honor System proceedings may be covered under the Family Educational Rights and Privacy Act (FERPA) as outlined on the University Registrar's website at http://www.registrar.vt.edu/records/ferpa.php.

ARTICLE X: OBLIGATIONS OF PARTIES INDIRECTLY INVOLVED IN HONOR SYSTEM CASES

1. Parties indirectly involved in Honor System cases include but are not limited to persons who witness alleged violations, witness discussions between referrers and accused students, and serve as members of the University community that help referrers and accused students prepare their case.
2. Parties indirectly involved in Honor System cases shall have the responsibility of maintaining confidentiality in all matters. Parties indirectly involved in Honor System Cases should be aware that the confidentiality of Honor System proceedings may be covered under the Family Educational Rights and Privacy Act (FERPA) as outlined on the University Registrar's website at http://www.registrar.vt.edu/records/ferpa.php.

ARTICLE XI: GENERAL

Section 1 - Reporting of Violations

It is the obligation of all members of the academic community to report alleged violations of the Graduate Honor Code. *Reporting the observance of a Graduate Honor Code violation shall not be optional; it shall be mandatory.* Reports should be submitted in writing to the Chief Justice or the Graduate Honor System Advisor on forms provided for that purpose, which are available at http://ghs.grads.vt.edu. The report form also may be obtained at the Graduate School.

Alleged violations of the Graduate Honor Code must be reported within ten (10) University business days after the date of discovery. Only under very special circumstances shall exceptions to this policy be granted, and then only at the discretion of the Chief Justice and the Graduate Honor System Advisor. A possible reason for exception could include, but is not limited to, unavoidable delays in obtaining the evidence.

Section 2 - Violations at Extended Campuses

1. Students engaged in graduate studies at any of Virginia Tech's extended campuses shall be subject to all provisions of this Constitution.
2. Designated members of the Investigative Board shall gather evidence. The evidence obtained shall be presented to the Investigative Board and shall be evaluated in a manner prescribed in Article IV of this Constitution.
3. Unless otherwise designated by the Chief Justice, with the approval of the Dean of the Graduate School, all hearings shall be conducted at the Virginia Tech main campus in Blacksburg.

Section 3 - Summer School

Because of the decreased availability of graduate student and faculty board and panel members during the summer, delays in processing and hearing cases may result. Thus, reasonable delays of this sort shall not be considered as violating the student's rights or as grounds for an appeal.

Section 4 - Graduate Students Enrolled in Undergraduate Classes

Graduate students shall be subject to stipulations within this Constitution regardless of whether they are enrolled in undergraduate or graduate classes.

Section 5 - Undergraduate Students Enrolled in Graduate Classes

The undergraduate honor system, commonly referred to as The Virginia Tech Honor System, shall have jurisdiction over cases involving undergraduate students in graduate classes unless the student is also enrolled in the Graduate School and taking graduate classes for graduate credit under the classification of "Dual Student" or " Combined Student," and "Bachelor/Master's Degree Student," in which case the Graduate Honor System shall have jurisdiction.

Section 6 - Violations Involving Graduate Students Already Graduated

If the degree towards which the student was working at the time of the alleged violation has already been awarded, the case shall be referred to the Dean of the Graduate School who shall convene a committee to review and investigate the charge and make recommendations. The committee composition shall be determined by the Dean of the Graduate School. The Chief Justice of the Graduate Honor System shall be an ex officio member of this committee and shall have the same voting privileges as the other members of this committee.

Section 7 - Recruitment of Graduate Honor System Members

Recognizing that it is strongest when it fosters and reflects the support of all graduate students and faculty at the University, the Graduate Honor System shall seek to be as broadly representative of the graduate student and faculty bodies at Virginia Tech as possible. To this end, all qualified graduate students and faculty shall be encouraged to participate in the Graduate Honor System. No otherwise qualified graduate student or faculty may be excluded from membership on the basis of race, sex, handicap, age, veteran status, national origin, religion, political affiliation, or sexual orientation.

Section 8 - Clearance of Graduate Student Records

Graduate students volunteering or appointed to serve on the Graduate Honor System must receive clearance of their personal disciplinary records and their academic records through the Dean of the Graduate School. Such clearances shall be conducted consistent with the University's regulations on the confidentiality of records and shall assure a minimum academic quality credit average of 3.00 and no previous or current disciplinary action for each appointee.

Section 9 - Confidentiality

All investigations, hearings, reviews, and other associated activities of the Graduate Honor System shall conform to the University's " Confidentiality of Student Records" as outlined on the University Registrar's website at http://www.registrar.vt.edu/records/ferpa.php.

Section 10 - Substitution of Graduate Honor System Personnel

The Chief Justice or the Graduate Honor System Advisor shall be authorized, when circumstances dictate, to appoint substitutes for any Graduate Honor System personnel in any case before the Graduate Honor System. However, faculty may not be substituted for graduate students and vice versa.

Section 11 - University Policies

Where appropriate, the Graduate Honor System shall abide by all applicable policies, statements, and principles as contained in the *University Policies for Student Life.*

Section 12 – Definition of a "University business day"

A "University business day," as referred to in this Constitution, shall be defined as any day on which the

main Virginia Tech campus is open and the Graduate School offices are open.

ARTICLE XII: AMENDMENTS

Proposed amendments to the Constitution of the Graduate Honor System may be initiated through one of the following channels: (1) by a majority vote of the Graduate Student Assembly, (2) by a majority vote of the Commission on Graduate Studies and Policies, or (3) by direct submission to the Chief Justice or the Dean of the Graduate School. Also, at the discretion of the Chief Justice and the Graduate Honor System Advisor, amendments may be initiated through the Graduate Honor System. Upon receiving such proposals, the Dean of the Graduate School shall convene the Constitution Revision Committee. With the approval of two-thirds of this committee, proposed amendments shall be forwarded for approval by the Commission on Graduate Studies and Policies and thereafter through the proper channels of the University governance structure (which at the time of the 2008-09 revision is described in Policies and Procedures No. 8011). Any substantive changes in proposed amendments as they proceed through subsequent levels of approval shall be resubmitted to the Constitution Revision Committee for its approval.

The Constitution Revision Committee shall consist of the Chief Justice (chair), the Graduate Honor System Advisor, a minimum of three (3) members of the Investigative Board (minimum of two (2) graduate students and one (1) faculty), a minimum of three (3) members of the Judicial Panel (minimum of two (2) graduate students and one (1) faculty), and up to two (2) other representatives from the graduate student body to be nominated by the Graduate Student Assembly.

2008-09 Revision

At the request of the Dean of the Graduate School, a Constitution Review Committee was convened in 2008 to perform a periodic review to bring the GHS Constitution up to date with current University policies and the climate and practices of the time. This revision was conducted by a panel of graduate students and faculty in accordance with the Constitution.

The goals of the current revision were two-fold: First, revisions were intended to address substantive issues that have arisen since the 1991 revision. Second, revisions were intended to improve the efficiency and effectiveness of the Honor System. The Review Committee considered a number of changes and ultimately rejected those that did not meet one or both of the above mentioned goals. The committee has worked very diligently to ensure that revisions enacted in 2009 would stand the test of time. All amendments recommended by the Constitution Revision Committee were unanimously approved by the Commission on Graduate Studies and Policies on April 15, 2009.

1991 Revision

Following the conclusion of the 1987 University Self-Study, a Constitution Revision Committee was convened to evaluate the Graduate Honor System. Since the Constitution had not received serious scrutiny in a decade or more, and since the Graduate Honor System has now matured to a level where the old Constitution is hardly serviceable, the ultimate goal of this committee from the outset was a revision of the Constitution. Much work has gone into ensuring that this revision will stand the test of time and will be instructive in guiding the operation of the Graduate Honor System in the years ahead.

Reference Material Used

Revision of this document was based on a variety of materials; these include:

1. *Constitution to the Virginia Tech [Undergraduate] Honor System, published in the Pylon (1988-89). (Article VII, Article VIII, several sections of Article IX, and Appendix A are used with and without modifications by permission of the Virginia Tech [Undergraduate] Honor System). Also, a report written by the Virginia Tech [Undergraduate] Honor System Self-Study Committee was used.*
2. *The University Judicial System's Manual for Hearing Officers, published by the Dean of Students Office, Virginia Tech (1989).*
3. *Several ideas and sentences from the following sources have been used with and without modification in the writing of the section "Purpose and Description of Graduate Honor Code" (Article I, Section 1):*
   a. *Reference 1.*
   b. *Cornell University Course of Study, "Code of Academic Integrity", (1989-1990), pp. 33-35.*
   c. *Bulletin of Duke University Graduate School, "Standards of Conduct", (March 1990), pp. 56-58.*
   d. *Record of the University of North Carolina at Chapel Hill, The Graduate School, "The Honor Code", (April 1990), pp. 70-72.*
   e. *University of Virginia Graduate Record, "The Honor System", (1987-1988), p.20 and p. 30.*
4. *Information used in defining "Misconduct in Research" (Article I, Section 3):*
   a. *Recommendations on "Research Misconduct and Graduate Students at VPI&SU" submitted to the Constitution Revision Committee by the Degree*

Requirements, Standards, Criteria and Academic Policies Committee (DRSCAPC) of the Commission on Graduate Studies, January 18, 1990.

b. *"Narrower Definition of Misconduct Urged," Public Affairs Newsletter, Federation of American Societies for Experimental Biology, Vol. 21, No. 12 (December 1988) p. 1.*

c. *Federal Register, Vol. 54, No. 151, (August 8, 1989) 32449.*

d. *"New Rules on Misconduct," Science, (August 11, 1989) p. 593.*

5. *"Computer Science Department Policy on Koofers, Old Programs, Cheating, and Microcomputer Use," CS Bits & Bytes (CS Dept. VPI&SU), Wednesday, February 15, 1989, pp. 7-8. (Ideas and and wording from this policy were used in Article I, Section 3.)*

APPENDIX: PLAGIARISM

The following text is reproduced with minor editorial changes, with permission, from the Constitution of the Virginia Tech [Undergraduate] Honor System.

DEFINITION

The Virginia Tech honor system constitution states that "Plagiarism includes the copying of the language, structure, ideas, and/or thoughts of another and passing off same as one's own, original work." The violation, then, consists of both *copying* and *misrepresenting the material in question.*

Generally, when a student places his or her name on any kind of work, whether it is specifically pledged or not, he or she claims responsibility for the originality of the contents except for those parts that are specifically attributed to another or that are considered common knowledge. (The concept of common knowledge poses a problem of definition, and the student should consult the section of this handbook that addresses that area.) Thus, if a student has consulted any outside source, whether published or not, and has incorporated any of its "language, structure, ideas, and/or thoughts" into his or her work without acknowledging that source, he or she may be guilty of misrepresenting the work's originality. [Furthermore, in citing a reference, the student must change both the sentence structure and the vocabulary (where possible) in expressing the original material in his or her own words.]

Copying includes a whole range of offenses. Everyone is familiar with stories involving a student who has "borrowed" or bought a term paper or laboratory report from a so-called research service, a fellow student, the Internet, or another similar source. Such wholesale copying is akin to the lifting of an assignment in its entirety from a book or journal article. In either case, the student in question submits work that is literally copied and transferred from one piece of paper to another; by claiming this work as his or her own, the student is clearly guilty of the most flagrant kind of plagiarism.

Another type of copying that is not as obvious, though equally serious, involves the translation of a part of a book, article, or other source into different words—paraphrasing. Although the language is not the same because the exact words of the source have been changed, the structure, ideas, and thoughts of the original author have been copied. Thus, the student who submits an assignment that simply paraphrases a source without identifying it may also be guilty of plagiarism.

Similarly, any combination of simple copying and paraphrasing, whether from one source or from many, is also a type of plagiarism, and the offender may be equally guilty as those students described above.

Because a person's ideas can be conveyed in many ways besides the written word, students should be aware that the copying of drawings, designs, photographs, maps, graphs, illustrations, tables, primary data, derived equations, computer programs, verbal communications of information and ideas, and other sources may also constitute plagiarism, unless the source is acknowledged and properly documented.

For the purposes of the Virginia Tech honor system, plagiarism can be broadly defined as the act of appropriating the literary composition, language, structure, ideas, and/or thoughts, drawings, laboratory reports, or computer programs of another or parts or passages thereof, and of passing them off as the original product of one's own mind. To be liable for plagiarism under the university's honor system, it is not necessary to duplicate another's literary work exactly; it being sufficient if unfair use of such work is made by lifting of substantial portions of it. Plagiarism is not confined to literal copying, but also includes any of the evasive variations and colorable alterations by which the plagiarist may disguise the source from which the material was copied. On the other hand, even an exact

counterpart of another's work does not constitute plagiarism if such counterpart was arrived at independently.

EXAMPLES OF CORRECT AND INCORRECT USES OF SOURCES

The following four examples provide illustrations of three kinds of plagiarism, as well as the proper use and acknowledgement of sources. The excerpt from Niccolo Machiavelli's *The Prince* is quoted from W. K. Marriott's translation (New York: E. P. Dutton, 1908), p. 37. The excerpts from student papers have been written for the purposes of this document.

FLAGRANT PLAGIARISM

Excerpt from The Prince

Whenever those states which have been acquired as stated have been accustomed to live under their own laws and in freedom, there are three courses for those who wish to hold them: the first is to ruin them, the next is to reside there in person, the third is to permit them to live under their own laws, drawing a tribute, and establishing within it an oligarchy which will keep it friendly to you. Because such a government, being created by the prince, knows that it cannot stand without his friendship and interest, and does its utmost to support him; and therefore he who would keep a city accustomed to freedom will hold it more easily by the means of its own citizens than in any other way.

Excerpt from a student paper

Whenever those *nations* which have been acquired have been accustomed to *living* under their own laws and in freedom, then there are three *options* for those who wish to *keep* them; the first is to ruin them, *second* is to reside there in person, and the *last* is to permit them to live under their own government, drawing a tribute, and establishing within it an oligarchy which will keep it friendly to you. Because such a government, being created by the *ruler*, knows that it cannot stand without his friendship and interest, and does its utmost to gain his support, and therefore, he who would keep a city accustomed to freedom will hold it more easily by the means of its own citizens than in any other way.

Comments

This student paper is an example of the most obvious form of plagiarism. The writer has copied Machiavelli almost verbatim without any acknowledgment. There have been some minor changes. For example, the italicized words have been changed. "States" becomes "nations," "courses" becomes "options," etc.

PLAGIARISM THROUGH PARAPHRASING

Excerpt from The Prince

Whenever those states which have been acquired as stated have been accustomed to live under their own laws and in freedom, there are three courses for those who wish to hold them: the first is to ruin them, the next is to reside there in person, the third is to permit them to live under their own laws, drawing a tribute, and establishing within it an oligarchy which will keep it friendly to you. Because such a government, being created by the prince, knows that it cannot stand without his friendship and interest, and does its utmost to support him; and therefore he who would keep a city accustomed to freedom will hold it more easily by the means of its own citizens than in any other way.

Excerpt from a student paper

There are basically three methods to maintain control over nations which formerly enjoyed their independence. First the nation can be completely destroyed. Second, the king can personally reside in the conquered territory. Finally, the king can permit them to live under their own rules; he would then levy a tax and establish a ruling clique which would be loyal to him. Since this government is created and maintained by the conquering power, the puppet government will do its utmost to support him in order to keep his friendship. In addition, by establishing a puppet government in such a manner, he will gain the allegiance of its citizens.

Comments

By paraphrasing the paragraph taken from Machiavelli, the student attempted to disguise the source of material. Nevertheless, it is quite obvious that the sentences of this writer parallel those of the Machiavelli text and are identical in meaning.

PLAGIARISM OF AN IDEA

Excerpt from The Prince

Whenever those states which have been acquired as stated have been accustomed to live under their own laws and in freedom, there are three courses for those who wish to hold them: the first is to ruin them, the next is to reside there in person, the third is to permit them to live under their own laws, drawing a tribute, and establishing within it an oligarchy which will keep it friendly to you. Because such a government, being created by the prince, knows that it cannot stand without his friendship and interest, and does its utmost to support him; and therefore he who would keep a city accustomed to freedom will hold it more easily by the means of its own citizens than in any other way.

Excerpt from a student paper

When the British established their empire in Asia and Africa during the eighteenth and nineteenth centuries, they were faced with the problem of how to govern and control effectively these areas which had formerly lived under their own government. There were essentially three methods of achieving this end: destroying the country; establishing direct rule through governors appointed by the king; and maintaining indirect control through the already established governing structure. The British chose indirect rule. Through indirect rule, the former officials realized that their position was now dependent upon the British. Consequently, their allegiance was assured, and through them the British obtained substantial economic benefits. In addition, the people, seeing their leaders still in power, obediently supported the indirect rule of the British.

Comments

The student has used the ideas of Machiavelli in describing a historical event. Machiavelli lists three methods of governing and controlling a state that had formerly been independent, and then shows the relative advantage of pursuing the last method. The student does not acknowledge the use of the description of the three methods of control nor the advantages of the last method when applying Machiavelli's idea to a specific example.

CORRECT USE OF PARAPHRASING AND DIRECT QUOTATIONS

Excerpt from The Prince

Whenever those states which have been acquired as stated have been accustomed to live under their own laws and in freedom, there are three courses for those who wish to hold them: the first is to ruin them, the next is to reside there in person, the third is to permit them to live under their own laws, drawing a tribute, and establishing within it an oligarchy which will keep it friendly to you. Because such a government, being created by the prince, knows that it cannot stand without his friendship and interest, and does its utmost to support him; and therefore he who would keep a city accustomed to freedom will hold it more easily by the means of its own citizens than in any other way.

Excerpt from a student paper

When the British established their empire in Asia and Africa during the eighteenth and nineteenth centuries, they were faced with the problem of how to govern these formerly independent areas effectively. According to Niccolo Machiavelli, in *The Prince*, a ruler had three options. He could destroy them, "reside there in person," or "permit them to live under their own laws, drawing a tribute and establishing within it an oligarchy which will keep it friendly to you."[1] Machiavelli felt that through this third method the conqueror gained the support of the former leaders and their subjects.[2]

The British seemed to apply this third method through their indirect rule concept. In other words, the British maintained control using the former leaders as figureheads. The former leaders realized that their position was now dependent upon the British. Consequently, their allegiance was assured and through them substantial economic benefits were obtained. In addition, the people, seeing their leaders still in power, obediently supported the indirect rule of the British.

[1] Niccolo Machiavelli, *The Prince*, trans. and intro. W. K. Marriott
(New York; E.P. Dutton, 1908), p.37.
[2] Machiavelli, p.37.

Comments

In this instance, the student has correctly footnoted the ideas of Machiavelli, which he has paraphrased and quoted. The writer has then applied Machiavelli's ideas to a more recent historical event.

THE PROBLEM OF COMMON KNOWLEDGE

The concept of common knowledge is one of the more difficult points to explain in any consideration of plagiarism. How can a student, often a novice in the subject, determine whether an idea or fact included in a paper is so widely known that it is considered common knowledge and requires no documentation? A few general guidelines for solving this dilemma can be suggested, but none is inviolate. Given the seriousness of plagiarism, the prudent writer cites a reference whenever he or she is uncertain.

1. Concepts and facts widely known outside of the specific area of study are generally considered common knowledge. These include undisputed dates (e.g. the adoption of the Declaration of Independence on July 4, 1776), scientific principles (e.g. Newton's Laws of Motion), and commonly accepted ideas (e.g., Hamlet's role as a tragic hero). Such data require no specific reference. Students should be aware, however, that the addition of minor informational embellishments might require documentation (e.g., that the Declaration of Independence was unanimously adopted by the American colonies on July 4, 1776, despite the abstention of New York).

2. The fact that material appears in a dictionary, encyclopedia, handbook, or other reference work or textbook does not guarantee that it is common knowledge. Such books are written by experts, and most of the information they contain is not widely known.

3. There is no simple test to determine whether information is common knowledge. In case of doubt, the student should consult his or her instructor.

DOCUMENTATION

To avoid plagiarism in writing, the student must be familiar with the concept of documentation. Terminology and methodology concerning proper ways to acknowledge sources are probably more confusing to students than any other aspect of research reporting. The purpose of documenting a source is first to give proper credit to others for their original words, thoughts, and ideas, and second to enable the interested reader to locate the original source in order to read or study further. Keeping this latter purpose in mind, one finds that the rules regarding documentation make more sense. Therefore, students should familiarize themselves with the proper methods of providing citations and bibliographies both to document their sources and to provide the reader with the necessary data to locate further information on the subject.

INDICATING QUOTATIONS

Whenever the exact wording of a source appears in a student paper, that fact must be made apparent to the reader. This goal can be accomplished in two ways. Brief quotations should be enclosed in quotation marks, whether complete sentences, phrases, or single significant words which have been incorporated into the student's own sentence or into a paraphrase or a longer excerpt of the source. The student should be careful to denote precisely where the source's exact wording begins and ends by the appropriate placing of opening and closing quotation marks.

Longer quotations (of more than three lines) should be indented ten spaces from the left-hand margin. Again, the beginning and ending of quoted material should be clearly indicated.

All direct quotations must be signified in one of these ways.

CITATIONS

Immediately following every piece of quoted or paraphrased material, some type of reference is required. The method used varies according to the field of study for which the paper is written; thus, students should ask instructors which style manual to use in preparing papers for their courses. Examples of two commonly used methods follow.

1. Footnotes or Endnotes: A small numeral in the text refers to a complete reference, similarly numbered, at the foot of the page or at the end of the paper. Notes should be numbered sequentially, beginning with "1."

Example:
"Congruence...between the self concept and the ideal self is one of the most fundamental conditions for both general happiness and for satisfaction in specific life areas."[1]

[1]Alfred L. Brophy, "Self, Role, and Satisfaction," *Genetic Psychology Monographs*, 59 (May 1959), 300.

2. Author-Date Citation: Following a quotation or paraphrase, the author's name and the publication date of the work appear in parentheses and refer the reader to the bibliography at the end of the paper.

Example:
For a person to be truly happy, his or her self concept must more or less coincide with the ideal self he or she envisions (Brophy, 1959).

BIBLIOGRAPHY OR LIST OF CITED REFERENCES

A list of all sources used, arranged alphabetically by the authors' last names, should appear at the end of every paper. Each entry should contain all information necessary for a reader to retrieve the work. Book entries usually include author's name, book title, and publication data (city, publisher, and date). Entries for periodical articles generally include author's name, article title, periodical title, volume number, date of issue, and pages on which the article appears. Students should make whatever adjustments that are necessary to these general rules so that entries coincide with the format prescribed by an instructor or by a specific manual. (An example of one type of bibliography format can be found in the list of style manuals which follows.)

This appendix is not intended to suggest or endorse any specific method of documentation. Rather, its purpose is to remind the student that acknowledgment of sources is necessary. The examples given above are provided as illustrations of some of many possibilities. The final authority regarding methods of documentation is the course instructor; students should choose a system of documentation and use it consistently throughout a paper. The following style manuals are commonly used.

American Psychological Association, *Publication Manual of the American Psychological Association*, 6th ed. Washington: APA, 2009.

Campbell, W.G., Ballou, S.V. and Slade, C. *Form and Style: Theses, Reports, Term Papers*. Boston: Houghton Mifflin Harcourt, 2007.

Huth, E.J. *Scientific Style and Format: The CBE Manual for Authors, Editors, and Publishers*. 6th ed. Council of Biology Editors, 1994.

Winkler, A.C. & McCuen-Metherell, J.R. *Writing the Research Paper: A Handbook, 2009 MLA Update Edition.* Wadsworth Publishing, 7th ed., 2009.

Modern Language Association. *MLA Handbook for Writers of Research Papers, Theses, and Dissertations.* New York: MLA. 7th ed., 2009.

Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations*. 7th ed. Chicago: University of Chicago Press, 2007.

RESOLUTION TO CLARIFY FACULTY HANDBOOK LANGUAGE ON RESEARCH FACULTY PROMOTION PROCESS

WHEREAS, research is part of the core mission of Virginia Tech, and

WHEREAS, research faculty make significant ongoing contributions to the university mission, and

WHEREAS, Virginia Tech wants to recognize and reward the contributions of research faculty through a process of review, recognition, and promotion where appropriate, consistent with the process for recognizing contributions of other types of faculty, now

THEREFORE, BE IT RESOLVED, that section 6.2 of the Faculty Handbook be modified and a section 6.2.1 and a section 6.2.2 be added that define the process for research faculty promotions as indicated below (changes and new language indicated in red):

6.2 Research Faculty Appointments

Research faculty appointments are designated to promote and expedite university research activities. The rank descriptions create several series common to current sponsored research or outreach projects. For example, employees involved in conducting research are generally appointed as research associates or research scientists (or to the "senior" titles for either of these). Those individuals who are appointed to a research traineeship for a period of up to four years following receipt of their doctorate are usually appointed as postdoctoral associates. (See Guidelines for the Hiring of Postdoctoral Associates on the OVPRI Human Resources website.) Usually, postdoctoral associates work closely with a faculty mentor in preparation for a career in academe or research; if they remain involved with research projects at Virginia Tech over a period of time, they are appointed or promoted into another appropriate rank.

The "project associate" series was designed for employees involved in sponsored activity other than traditional research, such as delivery of service or technical assistance, consultation with particular clients, preparation of manuals and materials, and so on. The project associate series is also appropriate for personnel involved primarily in the administration of large and complex sponsored programs.

~~While there is logic to the progression between and among ranks, employees may change ranks as appropriate or necessary to reflect a change in role or project. Promotions from one rank to another in order to recognize a faculty member's increased responsibilities, credentials, and/or contributions to the program over time may be recommended by the supervisor. Recommendations for promotions are done during the annual evaluation and merit adjustment process. The promotions require approval by the department head, dean, and Office of the Vice President for Research and Innovation. Approval by a departmental committee is also required for certain ranks (see below). A faculty member may not serve on any committee that is evaluating a spouse, family member, or other~~

~~individual with whom the faculty member has a close personal relationship. (See chapter two, "Potential Conflicts Involving Spouses and Immediate Family Members.")~~

Research faculty members may be assigned a functional title in addition to their official faculty rank in order to facilitate their work or clarify their role to internal or external constituencies. (A functional title may not be an official faculty rank other than that held by the research faculty member.) In some cases, increased responsibilities may lead to a change in functional title and possibly a salary adjustment rather than a promotion in faculty rank.

Appointments to research faculty ranks, except the rank of postdoctoral associate, are indefinitely renewable. However, tenure cannot be earned in any of the research faculty ranks and service is not applicable toward the pre-tenure probationary period if the employee is subsequently appointed to a tenure-track position.

The source of funds is not the determining factor as to whether a position carries a research faculty rank, but rather the nature and purpose of the assignment. Thus, a research faculty member may be funded by sponsored projects, overhead, state dollars, or other sources. Policies related to research faculty apply, regardless of the source of funding.

Research faculty may participate in activities outside of their direct source of funding, such as providing significant contributions to the conceptualization or writing of new proposals, or teaching; however, support for any time or effort spent on activities outside of their sponsored research must come from non-sponsored research funds. Special attention should be given in the development of position descriptions where funding is limited to only sponsored funding. (See chapter six, "Effort Certification Compliance Issues for Research Faculty Members," and chapter ten, "Effort Certification and Salary Charges to Sponsored Grants and Contracts.")

Original appointments and reappointments, including rank, salary, and other conditions, require the approval of the department head, dean (or next level administrator), and the Office of the Vice President for Research and Innovation *before* an offer is extended. Requests for principal investigator status may be submitted to the Office of the Vice President for Research and Innovation. Such requests require the approval of the department head, dean, and the Office of the Vice President for Research and Innovation**.**

6.2.1 Research Faculty Promotions: Non-professorial Ranks

While there is logic to the progression between and among ranks, employees may change ranks as appropriate or necessary to reflect a change in role or project. Promotions from one rank to another in order to recognize a faculty member's increased responsibilities, credentials, and/or contributions to the program over time may be recommended by the supervisor.

Recommendations for promotions ~~are done during the annual evaluation and merit adjustment process~~ within the non-professorial ranks (such as project associates, research associates, and research scientist) may be requested at any time during the year in recognition of significant increases in responsibilities, credentials or contributions. The promotions require approval by the department head, dean, and Office of the Vice President for Research and Innovation. ~~Approval by a departmental committee is also required for certain ranks (see below). A faculty member may not serve on any committee that is evaluating a spouse, family member, or other individual with whom the faculty member has a close personal relationship. (See chapter two, "Potential Conflicts Involving Spouses and Immediate Family Members.")~~ Following approval of the promotion request, a promotion letter signed by the department head should be presented to the employee.

6.2.2 Research Faculty Promotions: Professorial Ranks

Promotion recommendation into and within the research professorial faculty ranks (research assistant professor, research associate professor and research professor) should align with the annual timeline published by the university. Faculty members being considered for promotion have their dossiers reviewed by: (1) a departmental committee and the head or chair; (2) a college committee and the dean; and (3) the vice president for research and innovation. A parallel process for review, approved in advance by the executive vice president and provost and the vice president for research and innovation, is required for promotion of a member of the research professor series whose primary appointment is not in an academic department. A faculty member may not serve on any committee that is evaluating a spouse, family member, or other individual with whom the faculty member has a close personal relationship. (See chapter two, "Potential Conflicts Involving Spouses and Immediate Family Members.") Following approval of the promotion request, a promotion letter signed by the vice president of research and innovation should be presented to the employee.

RECOMMENDATION:

That the above resolution be approved.

June 4, 2018

RESOLUTION TO CLARIFY FACULTY HANDBOOK LANGUAGE ON OVERLOAD COMPENSATION FOR RESEARCH FACULTY MEMBERS TEACHING CREDIT CLASSES

WHEREAS, Virginia Tech places a high value on the contributions to the instructional mission and student learning made by qualified members of the university community, and

WHEREAS, while the primary responsibility of research faculty is to conduct research and advance the university's research mission, there are circumstances in which the university and its instructional program benefit from the occasional participation of research faculty members with appropriate expertise, and

WHEREAS, section 6.16 of the faculty handbook does not currently provide for additional compensation for research faculty members who teach a class in excess of their normal research assignment, and

WHEREAS, Virginia Tech has successfully piloted a process for compensating research faculty for teaching classes over and above their usual job responsibilities, now

THEREFORE, **BE IT RESOLVED**, that section 6.16 of the faculty handbook be modified to insert the third full paragraph below (new language indicated in red):

6.16 Instructional Responsibilities for Research Faculty Members

The primary responsibility of a research faculty appointment is to conduct research and contribute to the university's research mission through the acquisition of and successful implementation of sponsored grants and contracts. Federal guidelines require truthful and auditable documentation of the faculty member's efforts on a semester basis. If the faculty member's salary is paid for by sponsored grants and contracts then there is a concomitant expectation that the faculty member's time is allocated to those projects.

While keeping the primacy of the research role in mind, there are circumstances in which the university and its instructional programs benefit from the occasional participation of research faculty members who have the appropriate credentials, expertise, and interest. The usual limitation on teaching by research faculty members is one (three-credit) course per academic year, or no more than two courses in a two-year period. The principal investigator/supervisor, department head/chair, and dean must approve exceptions. The academic department provides instructional funding for the teaching appointment and research duties are adjusted accordingly. A three-credit course equates to .25 FTE during an academic semester; this is the usual basis for salary charges to the instructional budget.

Research faculty members may receive additional compensation to teach a class that is in excess of their normal research assignment. To qualify for additional compensation,

the research faculty member may not be 100% supported from sponsored funds, must be the instructor of record, and must usually be assigned to teach for the entire semester. For courses with block teaching, the research faculty member must have a formal teaching assignment for a specified portion of the course. The academic department responsible for the course must fund the payment from non-sponsored funds and initiate the payment as a temporary pay action. The payment must be approved jointly by the academic and home departments and colleges and by OVPRI.

RECOMMENDATION:

That the above resolution be approved.

June 4, 2018

RESOLUTION TO CLARIFY LANGUAGE IN FACULTY HANDBOOK ON REMOVAL PROCESSES FOR RESEARCH FACULTY MEMBERS

WHEREAS, research is part of the core mission of Virginia Tech, and

WHEREAS, research faculty make significant ongoing contributions to the university mission, and

WHEREAS, Chapter 6 of the Faculty Handbook describes policies and procedures related to the employment of research faculty, and

WHEREAS, language addressing removal of research faculty in Chapter 6 of the Faculty Handbook is in need of clarification, now

THEREFORE, BE IT RESOLVED that section 6.14 of the faculty handbook be modified as outlined below to clarify policies related to removal of research faculty (changes and new language in red).

6.14.1 Dismissal for Cause

Research faculty members may be removed for just cause. Stated causes for removal shall include, but are not limited to: professional incompetence; unacceptable or unsatisfactory performance after due notice; unethical conduct or misconduct that interferes with the capacity of the employee to perform effectively the requirements of the position; violation of university policy; falsification of credentials, experience, leave reports, or other official employment documents. Filing a grievance does not constitute just cause for termination.

When it becomes necessary to terminate a member of the research faculty for unsatisfactory performance prior to the end of the appointment period, the following procedures apply:

When the faculty supervisor determines that performance is unsatisfactory, the supervisor writes a letter to the individual detailing the areas of performance that are deficient. This letter should indicate specific expectations of improvement by the employee during a specified time period of not less than 30 calendar days. The department head and college dean receive copies. In cases where there is some likelihood of threat to health or safety, the 30-day period may be waived.

At the end of the above period, the faculty supervisor must again write the research faculty member with an evaluation of his/her performance during the interim since the first letter, with copies to the department head and college dean or equivalent senior-level manager. If performance continues to be unsatisfactory, this second letter may contain a termination notice. The termination notice has an effective date 45 calendar days from the date of the

second letter. In cases where there is a threat to health and safety, the 45-day period may be waived

In the event of termination, the research faculty member may appeal to the department head. Should the appeal process be initiated, the termination is held in abeyance until the appeal process is complete.

The appeal must be made in writing within five working days of receipt of the letter. (If the department head has a conflict of interest, the head refers the matter to the college dean.)

The department head (or dean) must respond in writing within 10 working days. If the recommendations of the department head (or dean) are unsatisfactory to either party, an appeal may be made to the vice president for research and innovation in writing within five working days.

The vice president for research and innovation appoints a committee of three members of the general faculty who make recommendations to the executive vice president and provost within 10 working days.

The decision of the provost is final and is rendered within 10 working days of receiving the report.
The above time limits of the appeal process may be altered by extenuating circumstances and the agreement of both parties.

If the research faculty member is a member of an interdisciplinary research center, the center director as well as the department head and college dean of the faculty supervisor are copied on all correspondence.

6.14.2 ~~Termination of Appointment for Faculty on Restricted Contracts~~ Non-reappointment of Research Faculty

The terms of faculty offer for a restricted appointment clearly defines the length of the appointment and also serves as a notice of termination. The terms of faculty offer also makes clear that continuation of appointment, even during the initial year, is subject to the availability of funds, the need for services, and satisfactory performance. (See section 6.9).

Research faculty members with regular appointment receive written notice of non-reappointment as described in chapter two, section 2.11, “Retirement, Resignation, and Non-Reappointment,” should it become necessary to end the appointment.

~~Occasionally a sponsor terminates funding before the end of a contract, or directs a change in the research program resulting in the need to terminate the services of an employee. While principal investigators and research centers are encouraged to make every effort to assure continuity of employment to individuals performing satisfactorily, there are circumstances in which this may not be possible or in the best interest of the research program or university. Research faculty appointments may be terminated in the~~

~~case where there are insufficient funds or no further need for services. The date of termination for a restricted faculty member is at least 30 calendar days from the date of notification. A faculty member on a regular appointment is entitled to notice of non-reappointment, as stated in chapter six, "Reappointment." A proposed notice of termination because of insufficient funds or lack of need for services requires the approval of the department head, and dean (or appropriate administrator), and the OVPRI Human Resources~~

6.14.3 Termination ~~Of Appointment For Faculty On Restricted Contracts~~ of Position Because of Insufficient Funds or No Further Need for Services

Occasionally a sponsor terminates funding before the end of a contract, or directs a change in the research program resulting in the need to terminate the services of an employee. While principal investigators and research centers are encouraged to make every effort to assure continuity of employment to individuals performing satisfactorily, there are circumstances in which this may not be possible or in the best interest of the research program or university. Research faculty appointments may be terminated in the case where there are insufficient funds or no further need for services. The date of termination for a restricted faculty member is at least 30 calendar days from the date of notification. A faculty member on a regular appointment is entitled to notice of non-reappointment, as stated in chapter ~~six "Reappointment"~~ two, section 2.11, "Retirement, Resignation, and Non-Reappointment." A proposed notice of termination because of insufficient funds or lack of need for services requires the approval of the department head, and dean (or appropriate administrator), and the OVPRI Human Resources.

RECOMMENDATION:

That the above resolution be approved.

June 4, 2018

RESOLUTION TO REVISE UNIVERSITY POLICES REGARDING TEXTBOOKS AND CREATE GUIDELINES FOR OPEN EDUCATIONAL RESOURCES TO COMPLY WITH AMENDED CODE OF VIRGINIA §23.1-1308

WHEREAS, Virginia Tech has policies and procedures regarding the procurement and use of textbooks in accordance with both the federal Higher Education Authorization Act, Public Law 110-135 (HEOA 2008), and the Code of Virginia; and

WHEREAS, effective July 1, 2018 the Code of Virginia §23.1-1308 (attached) directs the Virginia Tech Board of Visitors to amend and/or implement, as appropriate, policies, procedures, and guidelines addressing the use and procurement of textbooks, and open educational resources; and

WHEREAS, the university's current policies and procedures provide direction for the use and procurement of textbooks, and

WHEREAS, college and University Libraries faculty members have taken the initiative to be leaders in the production of open educational resources; now

THEREFORE, BE IT RESOLVED, effective July 1, 2018 and in accordance with Code of Virginia §23.1-1308 the Board of Visitors reaffirms the university's policies and procedures regarding textbook sales and bookstores and directs the university's administration to revise and amend, as necessary, the policies and procedures associated with textbook sales and bookstores, and

BE IT FURTHER RESOLVED, as outlined in Code of Virginia §23.1-1308, the Board of Visitors directs the university administration to "implement guidelines for the adoption and use of low-cost and no-cost open educational resources in courses offered…[including] provision for low-cost commercially published materials."

RECOMMENDATION:

That the Board of Visitors approve the resolution regarding textbooks and open educational materials.

June 4, 2018

CHAPTER 752

An Act to amend and reenact § 23.1-1308 of the Code of Virginia, relating to public institutions of higher education; governing boards; open educational resources.

[H 454]

Approved April 4, 2018

Be it enacted by the General Assembly of Virginia:

1. That § 23.1-1308 of the Code of Virginia is amended and reenacted as follows:

§ 23.1-1308. Governing board procedures; textbook sales and bookstores; open educational resources.

A. No employee of a public institution of higher education shall demand or receive any payment, loan, subscription, advance, deposit of money, services, or anything, present or promised, as an inducement for requiring students to purchase a specific textbook required for coursework or instruction. However, such employee may receive (i) sample copies, instructor's copies, or instructional material not to be sold and (ii) royalties or other compensation from sales of textbooks that include such instructor's own writing or work.

B. The governing board of each public institution of higher education shall implement procedures for making available to students in a central location and in a standard format on the relevant institutional website listings of textbooks required or assigned for particular courses at the institution. The lists of those required or assigned textbooks for each particular course shall include the International Standard Book Number (ISBN) along with other relevant information.

C. Public institutions of higher education maintaining a bookstore supported by auxiliary services or operated by a private contractor shall post the listing of such textbooks when the relevant instructor or academic department identifies the required textbooks for order and subsequent student purchase.

D. The governing board of each public institution of higher education shall implement policies, procedures, and guidelines that encourage efforts to minimize the cost of textbooks for students while maintaining the quality of education and academic freedom. The guidelines shall ensure that:

1. Faculty textbook adoptions are made with sufficient lead time to university-managed or contract-managed bookstores so as to confirm availability of the requested materials and, when possible, ensure maximum availability of used textbooks;

2. In the textbook adoption process, the intent to use all items ordered, particularly each individual item sold as part of a bundled package, is affirmatively confirmed by the faculty member before the adoption is finalized. If the faculty member does not intend to use each item in the bundled package, he shall notify the bookstore, and the bookstore shall order the individualized items when their procurement is cost effective for both the institution and students and such items are made available by the publisher;

3. Faculty members affirmatively acknowledge the bookstore's quoted retail price of textbooks selected for use in each course;

4. Faculty members are encouraged to limit their use of new edition textbooks when previous editions do not significantly differ in a substantive way as determined by the appropriate faculty member; and

5. Provisions address the availability of required textbooks to students otherwise unable to afford the cost.

E. *The governing board of each public institution of higher education shall implement guidelines for the adoption and use of low-cost and no-cost open educational resources in courses offered at such institution. Such guidelines may include provisions for low-cost commercially published materials.*

F. No funds provided for financial aid from university bookstore revenue shall be counted in the calculation for state appropriations for student financial aid.

RESOLUTION TO APPROVE NEW AND REVISED LANGUAGE IN FACULTY HANDBOOK REGARDING ALUMNI DISTINGUISHED PROFESSORS

WHEREAS, the preeminently recognized rank of Alumni Distinguished Professor has grown since its inception many years ago; and

WHEREAS, the standards for and expectations of current and recently appointed Alumni Distinguished Professors have evolved with the vision of Virginia Tech as a global land-grant university; and

WHEREAS, the description and criteria for selection in Section 3.2.2 of the Faculty Handbook are no longer accurate in describing how the rank has evolved; and

WHEREAS, the current description and criteria for selection have somewhat limited the consideration of nominees; and

WHEREAS, the Alumni Distinguished Professor embodies the university's mission by contributing extraordinary scholarly work across all three mission areas of the global land-grant university: teaching, research and/or creative activities, and engagement; now

THEREFORE, BE IT RESOLVED, that the new and revised language in the Faculty Handbook regarding Alumni Distinguished Professors be approved for inclusion in the university's 2018 – 2019 Faculty Handbook as attached below.

RECOMMENDATION:

That the Board of Visitors approve the resolution.

June 4, 2018

Included below:

- Revised ADP Language for Inclusion in 2018 – 2019 Faculty Handbook
- Current ADP Language in 2017 – 2018 Faculty Handbook
- "Tracked" version of new and revised ADP language in 2017-2018 Faculty Handbook

Revised ADP Language for Inclusion in 2018 – 2019 Faculty Handbook

3.2.2 Alumni Distinguished Professor

General conditions and definitions: The Alumni Distinguished Professorship (ADP) is a preeminent faculty appointment, reserved by the Board of Visitors for recognition of faculty members who demonstrate extraordinary accomplishments and academic citizenship through substantive scholarly contributions across all three of Virginia Tech's core mission areas of teaching, research or creative activity, and engagement. The provost determines the number of Alumni Distinguished Professors in consultation with the president and the Alumni Association. There is no quota by college or department.

Eligibility and criteria for selection: While no minimum number of years of service is required for eligibility, the selection committee places strong emphasis on the magnitude, character, and quality of each nominee's scholarly accomplishments as they contribute to the global land-grant mission of the university. Nominees must have well-established outstanding records of substantive scholarly accomplishment in teaching, research or creative activities, and engagement at Virginia Tech.

Responsibilities and perquisites: Each Alumni Distinguished Professor shall continue making scholarly contributions in teaching, research or creative activities, and engagement at the same high level evident at the time of appointment. This includes continued contributions to the department and college and may include contributions to other departments, colleges, and units, subject to the professor's interests and the ability of the department head or chair and college dean to accommodate such latitude. Alumni Distinguished Professors may also elect, in a given term, to divert energies from the usual activities or responsibilities to other valued scholarly pursuits appropriate to this university-level appointment.

Alumni Distinguished Professors embody the university's land-grant mission in their scholarly work and are also crucial faculty ambassadors within and beyond the university community. As such, they may be called upon from time to time, individually and as a group, to share their scholarship with university alumni or other interested groups, as well as to render special service or to offer particular advice to the university at large.

Each Alumni Distinguished Professor receives a base salary supplement from the endowment established by the Alumni Association and operating funds for scholarly support, as available, from eminent scholar programs.

Given the high level of performance expected of this select group of faculty members, university and college administrators are cognizant of the particular needs of each individual Alumni Distinguished Professor for appropriate support personnel and sufficient space, within acknowledged fiscal and physical constraints.

Nomination and selection procedures: Each academic year the provost, in consultation with the president and the Alumni Association, determines if there will be one or more appointments to the Alumni Distinguished Professor rank and, if so, issues a call to the academic deans for nominations. The deans, in turn, invite nominations from academic departments. Screening procedures at departmental and collegiate levels involve appropriate personnel or executive committees. Nominations dossiers include a current curriculum vitae, letters of nomination from both the departmental and collegiate screening committees, letters of support, and other evidence attesting to the quality of the nominee's scholarly contributions.

The provost appoints an Alumni Distinguished Professor Selection Committee that includes two current Alumni Distinguished Professors, one current University Distinguished Professor, and one faculty member recommended by the Commission on Faculty Affairs. The committee reviews the nominations and makes a recommendation to the provost. The provost's subsequent recommendation is sent through the president to the executive committee of the Board of Directors of the Virginia Tech Alumni Association for its review and recommendation. The president makes the final recommendation to the Board of Visitors for its approval.

The Board of Visitors confers upon an individual the rank of Alumni Distinguished Professor for a period of 10 years; the appointment may be renewed.

Procedures for renewal of appointments: An ADP may request renewal of his or her appointment at the end of the initial, or any subsequent, 10-year appointment period. A current curriculum vitae and five-page personal statement of accomplishments during the appointment term is requested by the office of the provost and reviewed by two current ADPs. The reviewing ADPs each make a recommendation regarding reappointment to the provost, who then forwards a recommendation to the president and Alumni Association for consideration. Final reappointment recommendations are made to the Board of Visitors for its approval. Renewed appointments are also for a period of 10 years.

Current ADP Language in 2017 – 2018 Faculty Handbook

3.2.2 Alumni Distinguished Professor

General conditions and definitions: The Alumni Distinguished Professorship (ADP) recognizes extraordinary academic citizenship and distinguished service within the Virginia Tech community. In recognition of the importance of alumni to the university, the Alumni Distinguished Professorship is a pre-eminent faculty appointment, reserved by the Board of Visitors for recognition of faculty members who, over time, have made outstanding contributions to the instructional program of the university and, in so doing, have touched the lives of generations of Virginia Tech alumni.

The Board of Visitors confers upon an individual an appointment as Alumni Distinguished Professor for a period of 10 years; the appointment may be renewed. The number of Alumni Distinguished Professors is determined by the provost, in consultation with the president and Alumni Association. There is no quota by college or department.

Eligibility and criteria for selection: Since the hallmark of the Alumni Distinguished Professorship is distinguished contribution—over time—to Virginia Tech, newly arrived faculty are not eligible for nomination. And while there is no specified minimum number of years of service required for eligibility, the selection committee places strong emphasis on the magnitude and character of the candidate's impact on academic programs at Virginia Tech. Nominees should also have established outstanding personal records of accomplishment in creative scholarship.

Nomination and selection procedures: Each academic year the provost determines if there will be one or more appointments to the Alumni Distinguished Professor group and, if appropriate, issues a call to the academic deans for nominations. The deans, in turn, invite nominations from academic departments. Screening procedures at departmental and collegiate levels involve appropriate personnel or executive committees in place. Nominations are accompanied by a full dossier of relevant materials including current curriculum vita, letters of nomination from both the departmental and collegiate screening committees, letters of support, and other evidence attesting to the quality of the contributions of the nominee(s).

The provost appoints an Alumni Distinguished Professor Selection Committee that includes two current Alumni Distinguished Professors, one current University Distinguished Professor, and one faculty member recommended by the Commission on Faculty Affairs. The committee reviews the nominations and makes a recommendation to the provost. The provost's subsequent recommendation is sent through the president to the executive committee of the Board of Directors of the Virginia Tech Alumni Association for its review and recommendation. The president makes the final recommendation to the Board of Visitors for its approval.

Perquisites and responsibilities: Each Alumni Distinguished Professor is provided a base salary supplement from the endowment established by the Alumni Association and matched by available funds, if available, from the eminent scholar program. The ADPs receive a salary supplement and operating allocation from the university comparable to that provided for other endowed professorships.

Each Alumni Distinguished Professor is expected to continue in service to the department, the college, and the university at the same high level evident at the time of appointment. But in particular, within whatever latitude the department head or chair and college dean can accommodate, the Alumni Distinguished Professor is encouraged to teach, when invited, in other departments of the university or in collegiate or university courses (e.g., honors colloquia). He or she may also elect, in a given term, to divert energies from the usual classroom responsibilities to other valued activities, such as substantive curriculum revision or textbook preparation.

Alumni Distinguished Professors are also called upon from time to time, individually and also as a group, to render special service or to offer particular advice to the university at large.

Given the high level of performance expected of this select group of faculty members, university and college administrators are cognizant of the particular needs of each individual Alumni Distinguished Professor for appropriate support personnel and sufficient space, within acknowledged fiscal and physical constraints.

Commission on Faculty Affairs
Resolution to Revise Faculty Handbook Section 3.2.2: Alumni Distinguished Professor
Resolution CFA 2017-18A

Approved by Commission on Faculty Affairs:	April 13, 2018
Faculty Senate Review:	Waived
First Reading by University Council:	May 7, 2018
Approved by University Council:	
Approved by the President:	
Approved by the Board of Visitors:	
Effective Date:	Upon Approval

WHEREAS, the preeminently recognized rank of Alumni Distinguished Professor has grown since its inception many years ago; and

WHEREAS, the standards for and expectations of current and recently appointed Alumni Distinguished professors have evolved with the vision of Virginia Tech as a global land-grant university; and

WHEREAS, the description and criteria for selection in the existing Faculty Handbook Section 3.2.2 are no longer accurate in describing how the rank has evolved; and

WHEREAS, the current description and criteria for selection have somewhat limited the consideration of nominees; and

WHEREAS, the Alumni Distinguished Professor embodies the university's mission by contributing extraordinary scholarly work across all three mission areas of the global land-grant university: teaching, research and/or creative activities, and engagement;

NOW, THEREFORE, BE IT RESOLVED that Faculty Handbook Section 3.2.2: Alumni Distinguished Professor be updated as attached:

3.2.2 Alumni Distinguished Professor

General conditions and definitions: The Alumni Distinguished Professorship (ADP) is a preeminent faculty appointment, reserved by the Board of Visitors for recognition of faculty members who demonstrate extraordinary accomplishments and academic citizenship through substantive scholarly contributions across all three of Virginia Tech's core mission areas of teaching, research or creative activity, and engagement. The provost determines the number of Alumni Distinguished Professors in consultation with the president and the Alumni Association. There is no quota by college or department.

Eligibility and criteria for selection: While no minimum number of years of service is required for eligibility, the selection committee places strong emphasis on the magnitude, character, and quality of each nominee's scholarly accomplishments as they contribute to the global land-grant mission of the university. Nominees must have well-established outstanding records of substantive scholarly accomplishment in teaching, research or creative activities, and engagement at Virginia Tech.

Responsibilities and perquisites: Each Alumni Distinguished Professor shall continue making scholarly contributions in teaching, research or creative activities, and engagement at the same high level evident at the time of appointment. This includes continued contributions to the department and college and may include contributions to other departments, colleges, and units, subject to the professor's interests and the ability of the department head or chair and college dean to accommodate such latitude. Alumni Distinguished Professors may also elect, in a given term, to divert energies from the usual activities or responsibilities to other valued scholarly pursuits appropriate to this university-level appointment.

Alumni Distinguished Professors embody the university's land-grant mission in their scholarly work and are also crucial faculty ambassadors within and beyond the university community. As such, they may be called upon from time to time, individually and as a group, to share their scholarship with university alumni or other interested groups, as well as to render special service or to offer particular advice to the university at large.

Each Alumni Distinguished Professor receives a base salary supplement from the endowment established by the Alumni Association and operating funds for scholarly support, as available, from eminent scholar programs.

Given the high level of performance expected of this select group of faculty members, university and college administrators are cognizant of the particular needs of each individual Alumni Distinguished Professor for appropriate support personnel and sufficient space, within acknowledged fiscal and physical constraints.

Nomination and selection procedures: Each academic year the provost, in consultation with the president and the Alumni Association, determines if there will be one or more appointments to the Alumni Distinguished Professor rank and, if so, issues a call to the academic deans for nominations. The deans, in turn, invite nominations from academic departments. Screening procedures at departmental and collegiate levels involve appropriate personnel or executive committees. Nominations dossiers include a current curriculum vitae, letters of nomination

from both the departmental and collegiate screening committees, letters of support, and other evidence attesting to the quality of the nominee's scholarly contributions.

The provost appoints an Alumni Distinguished Professor Selection Committee that includes two current Alumni Distinguished Professors, one current University Distinguished Professor, and one faculty member recommended by the Commission on Faculty Affairs. The committee reviews the nominations and makes a recommendation to the provost. The provost's subsequent recommendation is sent through the president to the executive committee of the Board of Directors of the Virginia Tech Alumni Association for its review and recommendation. The president makes the final recommendation to the Board of Visitors for its approval.

The Board of Visitors confers upon an individual the rank of Alumni Distinguished Professor for a period of 10 years; the appointment may be renewed.

Procedures for renewal of appointments: An ADP may request renewal of his or her appointment at the end of the initial, or any subsequent, 10-year appointment period. A current curriculum vitae and five-page personal statement of accomplishments during the appointment term is requested by the office of the provost and reviewed by two current ADPs. The reviewing ADPs each make a recommendation regarding reappointment to the provost, who then forwards a recommendation to the president and Alumni Association for consideration. Final reappointment recommendations are made to the Board of Visitors for its approval. Renewed appointments are also for a period of 10 years.

3.2.2 Alumni Distinguished Professor

General conditions and definitions: The Alumni Distinguished Professorship (ADP) is a pre-eminent faculty appointment, reserved by the Board of Visitors for recognition of faculty members who ~~recognizes~~ demonstrate extraordinary accomplishments and academic citizenship through substantive scholarly ~~academic citizenship~~contributions across all three of Virginia Tech's core mission areas of teaching, research or creative activity, and engagement. The provost determines the number of Alumni Distinguished Professors in consultation with the president and the Alumni Association. There is no quota by college or department.~~and distinguished service within the Virginia Tech community. In recognition of the importance of alumni to the university, the Alumni Distinguished Professorship is a pre-eminent faculty appointment, reserved by the Board of Visitors for recognition of faculty members who, over time, have made outstanding contributions to the instructional program of the university and, in so doing, have touched the lives of generations of Virginia Tech alumni.~~

~~The Board of Visitors confers upon an individual an appointment as Alumni Distinguished Professor for a period of 10 years; the appointment may be renewed.~~ ~~The number of Alumni Distinguished Professors is determined by the provost, in consultation with the president and Alumni Association. There is no quota by college or department.~~

Eligibility and criteria for selection: ~~Since the hallmark of the Alumni Distinguished Professorship is distinguished contribution – over time – to Virginia Tech, newly arrived faculty are not eligible for nomination.~~ ~~And~~ W~~w~~hile ~~there is~~ no ~~specified~~ minimum number of years of service is required for eligibility, the selection committee places strong emphasis on the magnitude, ~~and~~ character, and quality of ~~the candidate's~~each nominee's ~~impact~~ scholarly accomplishments as they contribute to the global land-grant mission ~~on academic programs at of Virginia Tech~~the university. Nominees ~~should~~ must ~~also~~ have well-established outstanding ~~personal~~ records of substantive scholarly accomplishment in teaching, research or creative ~~scholarship~~activities, and engagement at Virginia Tech.~~.~~

~~**Nomination and selection procedures**: Each academic year the provost determines if there will be one or more appointments to the Alumni Distinguished Professor group and, if appropriate, issues a call to the academic deans for nominations. The deans, in turn, invite nominations from academic departments. Screening procedures at departmental and collegiate levels involve appropriate personnel or executive committees in place. Nominations are accompanied by a full dossier of relevant materials including current curriculum vita, letters of nomination from both the departmental and collegiate screening committees, letters of support, and other evidence attesting to the quality of the contributions of the nominee(s).~~

~~The provost appoints an Alumni Distinguished Professor Selection Committee that includes two current Alumni Distinguished Professors, one current University Distinguished Professor, and one faculty member recommended by the Commission on Faculty Affairs. The committee reviews the nominations and makes a recommendation to the provost. The provost's subsequent recommendation is sent through the president to the executive committee of the Board of Directors of the Virginia Tech Alumni Association for its review and recommendation. The president makes the final recommendation to the Board of Visitors for its approval.~~

Updated 4/3/2018 per discussion from CFA first reading, Provost feedback, and further review by ADPs

~~Perquisites and r~~**Responsibilities** and perquisites: ~~Each Alumni Distinguished Professor is provided a base salary supplement from the endowment established by the Alumni Association and matched by available funds, if available, from the eminent scholar program. The ADPs receive a salary supplement and operating allocation from the university comparable to that provided for other endowed professorships.~~

Each Alumni Distinguished Professor ~~is expected to~~shall continue making scholarly contributions in teaching, research or creative activities, and engagement ~~in service to the department, the college, and the university~~ at the same high level evident at the time of appointment. This includes continued contributions to the department and college and may include contributions to other departments, colleges, and units, subject to the professor's interests and the ability of ~~But in particular, within whatever latitude~~ the department head or chair and college dean ~~can~~ to accommodate such latitude.~~, the Alumni Distinguished Professor is encouraged to teach, when invited, in other departments of the university or in collegiate or university courses (e.g., honors colloquia).~~ Alumni Distinguished Professors ~~He or she~~ may also elect, in a given term, to divert energies from the usual ~~classroom~~ activities or responsibilities to other valued scholarly ~~activitie~~pursuits appropriate to this university-level appointment.~~s, such as substantive curriculum revision or textbook preparation.~~

Alumni Distinguished Professors embody the university's lane-grant mission in their scholarly work and are also crucial faculty ambassadors within and beyond the university community. As such, they ~~are also~~ may be called upon from time to time, individually and ~~also~~ as a group, to share their scholarship with university alumni or other interested groups, as well as to render special service or to offer particular advice to the university at large.

Each Alumni Distinguished Professor ~~is provided~~receives a base salary supplement from the endowment established by the Alumni Association and ~~matched by available funds~~operating funds for scholarly support, as~~if~~ available, from ~~the~~ eminent scholar programs. ~~The ADPs receive a salary supplement and operating allocation from the university comparable to that provided for other endowed professorships.~~

Given the high level of performance expected of this select group of faculty members, university and college administrators are cognizant of the particular needs of each individual Alumni Distinguished Professor for appropriate support personnel and sufficient space, within acknowledged fiscal and physical constraints.

Nomination and selection procedures: Each academic year the provost, in consultation with the president and the Alumni Association, ~~-~~determines if there will be one or more appointments to the Alumni Distinguished Professor ~~group~~ rank and, if ~~appropriate~~so, issues a call to the academic deans for nominations. The deans, in turn, invite nominations from academic departments. Screening procedures at departmental and collegiate levels involve appropriate personnel or executive committees ~~in place~~. Nominations dossiers include ~~are accompanied by a full dossier of relevant materials including~~ a current curriculum vitae, letters of nomination from both the departmental and collegiate screening committees, letters of support, and other evidence attesting to the quality of the ~~contributions of the nominee(s)~~nominee's scholarly contributions.

Updated 4/3/2018 per discussion from CFA first reading, Provost feedback, and further review by ADPs

The provost appoints an Alumni Distinguished Professor Selection Committee that includes two current Alumni Distinguished Professors, one current University Distinguished Professor, and one faculty member recommended by the Commission on Faculty Affairs. The committee reviews the nominations and makes a recommendation to the provost. The provost's subsequent recommendation is sent through the president to the executive committee of the Board of Directors of the Virginia Tech Alumni Association for its review and recommendation. The president makes the final recommendation to the Board of Visitors for its approval.

The Board of Visitors confers upon an individual ~~an appointment as~~the rank of Alumni Distinguished Professor for a period of 10 years; the appointment may be renewed.

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Updated 4/3/2018 per discussion from CFA first reading, Provost feedback, and further review by ADPs

RESOLUTION FOR AN INGRESS AND EGRESS EASEMENT TO THE NEW RIVER VALLEY REGIONAL WATER AUTHORITY

The New River Valley Regional Water Authority has requested that the university grant an easement for ingress and egress along a roadway partially located on university owned property in the Prices Fork Magisterial District of Montgomery County, Virginia, to provide access to the Montgomery County Public Service Authority's water tank located on Price Mountain.

RESOLUTION FOR AN INGRESS AND EGRESS EASEMENT TO THE NEW RIVER VALLEY REGIONAL WATER AUTHORITY

WHEREAS, on June 3, 2002, the Board of Visitors authorized Virginia Polytechnic Institute and State University ("Virginia Tech") to grant an easement to the Montgomery County Public Service Authority ("PSA") for ingress and egress, along a well-defined roadway partially located on Virginia Tech's Fishburn tract, to the PSA's water tank on Price Mountain; and

WHEREAS, Virginia Tech granted an easement for the purposes of ingress and egress to the water tank on Price Mountain to the PSA by deed of easement dated October 10, 2002, which deed of easement is recorded in the Clerk's Office of the Circuit Court for Montgomery County, Virginia, at Instrument Number 2002016354; and

WHEREAS, said easement for ingress and egress along the well-defined roadway located on Virginia Tech's Fishburn tract is more particularly shown and described on the Anderson & Associates, Inc. plat dated March 4, 2002 and signed by the surveyor on September 20, 2002, entitled "Plat of Lease Parcel, Water Line & Ingress/Egress Easements To Be Acquired By Montgomery County Public Service Authority From Virginia Tech Foundation, Inc. And V.P.I. & S. U. Located in Prices Fork Magisterial District Montgomery County, Virginia," a copy of which plat is attached hereto, and which non-exclusive ingress and egress easement area would be approximately 3.46 acres; and

WHEREAS, the New River Valley (NRV) Regional Water Authority has requested that Virginia Tech grant it an easement, similar to the easement granted to the PSA, for ingress and egress to install, operate, and maintain the Supervisory Control and Data Acquisition ("SCADA") equipment at the Price Mountain PSA water tank; and

WHEREAS, the Virginia Tech College of Natural Resources and Environment and the PSA have stated support for the NRV Regional Water Authority's request for an easement for ingress and egress along the same well-defined roadway to and from the PSA water tank on Price Mountain; and

WHEREAS, Virginia Tech desires to grant said non-exclusive easement for ingress and egress to and from the PSA water tank to the NRV Regional Water Authority;

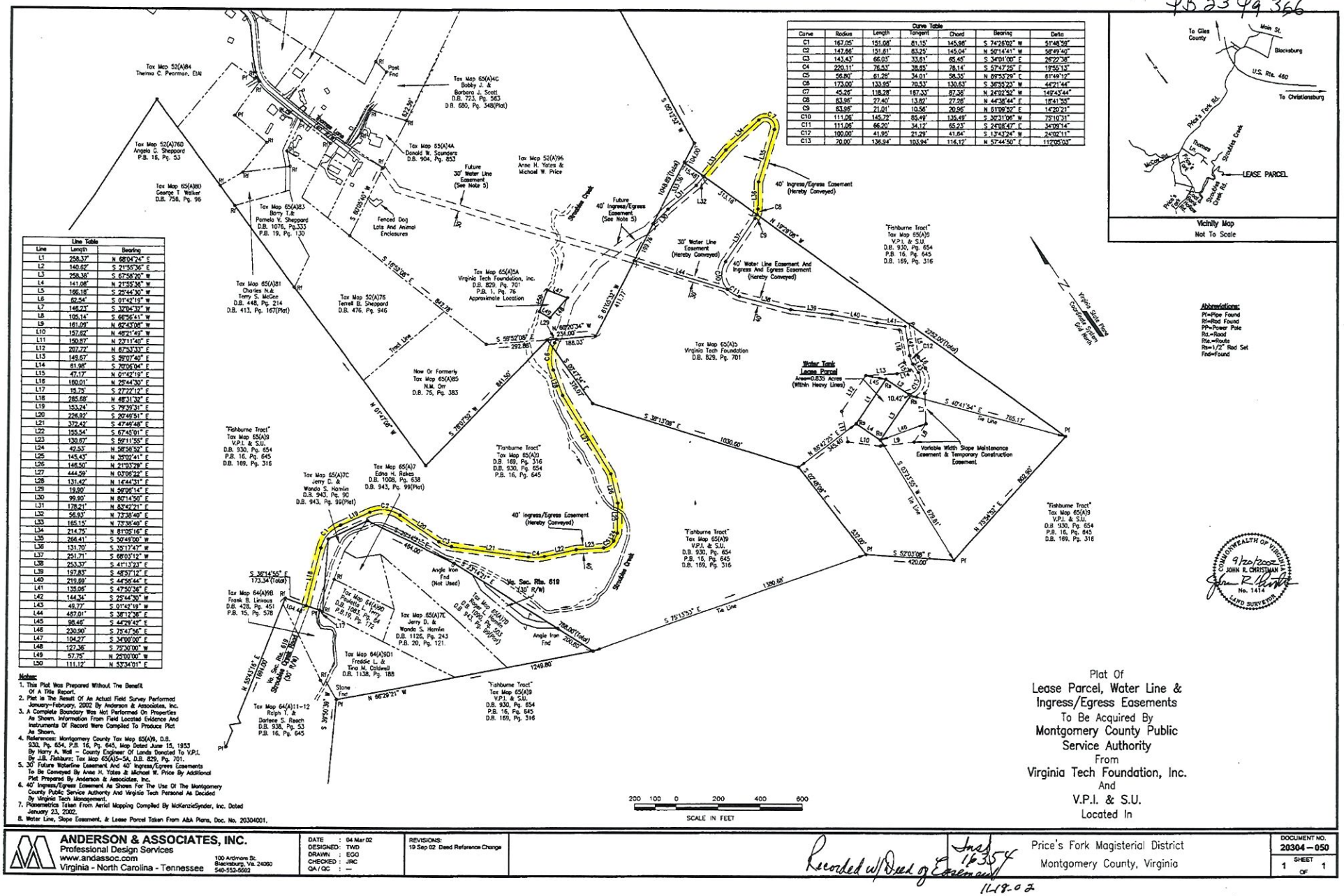
NOW, THEREFORE BE IT RESOLVED, that the Vice President for Operations be authorized to execute a non-exclusive easement for ingress and egress to the NRV Regional Water Authority in accordance with applicable procedures for said easement as permitted by the Higher Education Restructuring Act and Management Agreement with the Commonwealth of Virginia, and the Code of Virginia (1950), as amended.

RECOMMENDATION:

That the above resolution authorizing the Vice President for Operations to execute a non-exclusive easement for ingress and egress to the NRV Regional Water Authority be approved.

June 4, 2018

PB 23 Pg 366



Notes:
1. This Plat Was Prepared Without The Benefit Of A Title Report.
2. Plat Is The Result Of An Actual Field Survey Performed January-February, 2002 By Anderson & Associates, Inc.
3. A Complete Boundary Was Not Performed On Properties As Shown. Information From Field Located Evidence And Instruments Of Record Were Compiled To Produce Plat As Shown.
4. References: Montgomery County Tax Map 65(A)9, D.B. 930, Pg. 654, P.B. 16, Pg. 645, Map Dated June 15, 1953 By Harry A. Wall – County Engineer Of Lands Deeded To V.P.I. By J.B. Fishburn; Tax Map 65(A)5-5A, D.B. 829, Pg. 701.
5. 30' Future Waterline Easement And 40' Ingress/Egress Easements To Be Conveyed By Anne H. Yates & Michael W. Price By Additional Plat Prepared By Anderson & Associates, Inc.
6. 40' Ingress/Egress Easement As Shown For The Use Of The Montgomery County Public Service Authority And Virginia Tech Personnel As Decided By Virginia Tech Management.
7. Planimetrics Taken From Aerial Mapping Compiled By McKenzieSnyder, Inc. Dated January 23, 2002.
8. Water Line, Slope Easement, & Lease Parcel Taken From A&A Plans, Doc. No. 20304001.

COMMONWEALTH OF VIRGINIA
9/20/2002
JOHN R. CHRISTMAN
No. 1414
LAND SURVEYOR

Plat Of
Lease Parcel, Water Line & Ingress/Egress Easements
To Be Acquired By
Montgomery County Public Service Authority
From
Virginia Tech Foundation, Inc.
And
V.P.I. & S.U.
Located In
Price's Fork Magisterial District
Montgomery County, Virginia

ANDERSON & ASSOCIATES, INC.
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100 Ardmore St.
Blacksburg, Va. 24060
540-552-6602

DATE : 04 Mar 02
DESIGNED: TWD
DRAWN : EGO
CHECKED : JRC
QA / QC : —

REVISIONS:
19 Sep 02 Deed Reference Change

Recorded w/Deed of Easement Inst # 16354 11-19-02

DOCUMENT NO. 20304 – 050
SHEET 1 OF 1

Attachment O

RESOLUTION ON APPOINTMENT TO THE NEW RIVER VALLEY REGIONAL WATER AUTHORITY

The New River Valley Regional Water Authority (the Authority) consists of five members who are responsible for the management and operation of the Authority. One member is appointed by each of the participating political subdivisions, and the other member is appointed jointly by the Virginia Tech Board of Visitors, the Blacksburg and Christiansburg Town Councils, and the Montgomery County Board of Supervisors. The jointly appointed member of the Authority has a term that expires on June 30, 2018.

The members of the authority recommend William R. Knocke as the new at-large member to the Authority. Dr. Knocke is the W.C. English Professor and Program Coordinator in the The Charles E. Via, Jr. Department of Civil & Environmental Engineering at Virginia Tech. Dr. Knocke is a licensed Professional Engineer, specializes in Environmental and Water Resources Engineering, and his areas of interest include: physical-chemical treatment of water and wastewater, chemistry of aquatic systems, sludge treatment and disposal, and hazardous waste assessment and treatment. Knocke's Bachelor of Science, Master of Science, and Ph.D. are in civil engineering from the University of Missouri, with a concentration in environmental engineering.

RESOLUTION ON APPOINTMENT TO THE NEW RIVER VALLEY REGIONAL WATER AUTHORITY

WHEREAS, the New River Valley Regional Water Authority (the Authority) consists of five members who are responsible for the management and operation of the Authority; and

WHEREAS, one member is appointed by each of the political subdivisions, and the other member is appointed jointly by the Virginia Tech Board of Visitors, the Blacksburg and Christiansburg Town Councils, and the Montgomery County Board of Supervisors; and

WHEREAS, the jointly appointed member of the Authority has a term that expires on June 30, 2018; and

WHEREAS, the members of the authority desire to appoint William R. Knocke as the at-large member for a four-year term;

NOW, THEREFORE, BE IT RESOLVED, that William R. Knocke be appointed as joint member of the New River Valley Regional Water Authority for a four-year term expiring June 30, 2022.

RECOMMENDATION:

That the above resolution appointing William R. Knocke as joint representative to the New River Valley Regional Water Authority through June 30, 2022 be approved.

June 4, 2018

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

HOTEL ROANOKE CONFERENCE CENTER COMMISSION BUDGET

May 2, 2018

The Hotel Roanoke Conference Center Commission was established by resolutions adopted by Virginia Tech on November 18, 1991 and by the City Council of the City of Roanoke, Virginia on April 14, 1992, pursuant to Chapter 440 of the 1991 Acts of Assembly of the Commonwealth of Virginia, adopted March 20, 1991. Section 21 B of the enabling legislation provided that the Commission shall annually prepare and submit to both the City of Roanoke and Virginia Tech (the "Participating Parties") a proposed operating budget showing its estimated revenues and expenses on an accrual basis for the forthcoming fiscal year and if such estimated expenses exceed such estimated revenues, the portion of the deficit proposed to be borne by each Participating Party.

The Commission has adopted and approved its operating budget for the fiscal year 2018-19. Virginia Tech and the City of Roanoke will make equal contributions of $80,000 to the Commission for fiscal year 2018-19. The recommended budget is shown on the following page.

HOTEL ROANOKE CONFERENCE CENTER COMMISSION
BUDGET
JULY 2018 - JUNE 2019

Revenues

City of Roanoke	$ 80,000
Virginia Tech	80,000
	$ 160,000

Expenses

Salaries and Fringe Benefits	$ 77,000
Fees for Professional Services	78,000
Administrative Expenses	1,500
Technology Support Services and Equipment	1,200
Commission Operations	2,300
	$160,000

RECOMMENDATION:

That the budget for The Hotel Roanoke Conference Center Commission for 2018-2019 be approved.

Virginia Tech-Wake Forest University
School of Biomedical Engineering and Sciences
2018-19 Operating Budget

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 30, 2018

The Board of Visitors of Virginia Tech adopted a resolution that authorized the establishment of the Virginia Tech-Wake Forest University School of Biomedical Engineering and Sciences on August 26, 2002. Subsequently, Virginia Tech and Wake Forest University entered into a collaboration agreement which outlines the relationship and responsibilities of each party. As stated in the collaboration agreement, the annual operating budget for the School of Biomedical Engineering and Sciences requires approval by the governing boards of each university.

The 2018-19 recommended budget of $5,751,978 for Virginia Tech's contribution to the School of Biomedical Engineering and Sciences is shown on the following page.

Virginia Tech-Wake Forest University
School of Biomedical Engineering and Sciences
2018-19 Operating Budget

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 30, 2018

Revenues

University Allocation	$	5,751,978

Expenses

Faculty	$	3,044,525
Staff		174,020
Graduate Students		371,386
Fringes		1,269,503
Subtotal Personnel Costs		4,859,434
Operating Costs		331,709
Faculty Start Up Packages (one-time)		560,835
Subtotal Non-personnel Costs		892,544
Total Expenses	$	5,751,978
Net		-

RECOMMENDATION:

That the 2018-19 budget for the Virginia Tech - Wake Forest School of Biomedical Engineering and Sciences be approved.

June 4, 2018

RESOLUTION TO APPOINT UNIVERSITY COMMISSIONER TO THE HOTEL ROANOKE CONFERENCE CENTER COMMISSION

WHEREAS, the Virginia General Assembly approved legislation known as the "Hotel Roanoke Conference Center Commission Act" to provide for the establishment of a conference center commission; and,

WHEREAS, the Act provides for the appointment of three commissioners each from the City of Roanoke and from Virginia Polytechnic Institute and State University; and,

WHEREAS, the Act provides that the commissioner appointments be staggered; and,

WHEREAS, the terms of the appointments shall be four years, and shall end on June 30 of the respective year; and,

WHEREAS, pursuant to the Act, the Board of Visitors of Virginia Polytechnic Institute and State University reappoints effective July 1, 2018, the following as commissioner:

- Vice President for Outreach and International Affairs June 30, 2022

NOW, THEREFORE, BE IT RESOLVED that the appointment of the Vice President for Outreach and International Affairs shall continue effective July 1, 2018 with the approval of this resolution.

RECOMMENDATION:

That the above resolution for the appointment of the Vice President for Outreach and International Affairs as the university's representative on the Hotel Roanoke Conference Center Commission be approved.

June 4, 2018

RESEARCH AND DEVELOPMENT DISCLOSURE REPORT
March 10, 2018 through May 18, 2018

Reason for Conflict	External Entity	Owner	Principal Investigator	Co - P.I.'s	College	Period of Performance	Award Amount	Project Description
Faculty-Employee Owned Business	Li Industries Inc.	Zheng Li Michael Ellis	Zheng Li	 Michael Ellis	Mechanical Engr. Mechanical Engr.	TBD	$90,000	Both Dr. Li and Dr. Ellis hold an equity stake in Li Industries. The Company has received a NSF STTR award and seeks to subcontract to VT. Drs. Li and Ellis will perform the subcontract work for VT. The company portion of the work will be handled by Dr. Schmidt, CEO. Dr. Schmidt is not a VT employee. A management plan is in place to document the oversight for this project which involves investigating lithium deficient materials suspension.
Faculty-Employee Owned Business	Prime Research (dba Prime Photonics LLC)	Anbo Wang Gary Pickrell			Electrical & Computer Engineering Materials Science & Engineering	April 1, 2018 thru June 30, 2019	Master Agreement up to $200,000	Prime Research has been a research partner with Virginia Tech for many years. The company has been a sponsor to the university for a variety of federal flow-thru projects. Drs. Wang and Pickrell both hold an equity interest in Prime Research but do not participate in research projects funded to VT. A current subcontract to VT will be under the direction of Dr. Todd Lowe in the Aerospace & Ocean Engineering Department. This work involves aircraft inlets. A management plan is in place.
Faculty-Employee Owned Business	Engle-Stone Aquatic LLC.	Carole Engle			Affiliated Faculty with VA Seafood AREC	April 1, 2018 thru June 30, 2019	Master Agreement up to $100,000	Dr. Engle is an unpaid affiliated faculty member associated with the Virginia Seafood AREC. Dr. Engle's expertise in certain acquculture has increased sponsored research at the AREC with specific fish species. Dr. Engle's private consulting business is involved on some proposals as a subcontractor. Because of the on-going close associations between VT, Dr. Engle and her consulting business, we are reporting this activity and will ensure appropriate COI management plans are in place for any sponsored programs which may occur in the future.

REPORT OF THE JUNE 3, 2018, INFORMATION SESSION

An information session (open session) for the Board of Visitors was held on Sunday, June 3, 2018, from 1:30 to 3:30 p.m. in Room 170 of the Classroom Building at Virginia Tech. There were no action items, and there was no public comment period. The agenda included:

- Tour of the Classroom Building and Integrated Security Education Research Center (ISERC) within by Dr. Ken Smith, Vice Provost for Academic Resource Management, and Dr. David Raymond, Deputy Director of the Information Technology Security Office.
- Presentation on Industry Partnerships and Technology Transfer, Dr. Theresa Mayer, Vice President for Research and Innovation.
- Briefing on the Strategic Plan by Dr. Menah Pratt-Clarke, Vice President of Strategic Affairs and Vice Provost for Inclusion and Diversity.
- Presentation on InclusiveVT May 3 Town Hall meeting by Dr. Menah Pratt-Clarke, Vice President of Strategic Affairs and Vice Provost for Inclusion and Diversity.
- Presentation on Increasing Diversity in Science: Concrete Steps by Dr. Sally Morton, Dean of the College of Science
- Presentation on the Promotion and Tenure Process by Dr. Jack Finney, Vice Provost for Faculty Affairs.
- Constituent Reports
- Update on budget passed by the General Assembly in special session by Mr. Dwight Shelton, Interim Senior Vice President for Operations and Administration.
- Review of the Annual Cycle of BOV Agenda Items by Rector Dennis Treacy.

(Copies of the presentations are filed with the permanent minutes and attached.)

Virginia Tech Board of Visitors Meeting

Information Session

Sunday, June 3, 2018
1:30 - 3:30 p.m.
The Classroom Building, Room 170
Virginia Tech Campus

Tour of Classroom Building and Integrated Security Education and Research Center (ISERC)
- Dr. Ken Smith, Vice Provost, Academic Resource Management
- Dr. Kira Gantt, Associate Director of Education and Outreach, Hume Center for Security and Technology

Industry Partnerships and Technology Transfer
- Dr. Theresa Mayer, Vice President for Research and Innovation

Strategic Planning Update
- Dr. Menah Pratt-Clarke, Vice President for Strategic Affairs & Vice Provost for Inclusion and Diversity

InclusiveVT

Summary of May 3 Town Hall Meeting
- Dr. Menah Pratt-Clarke, Vice President of Strategic Affairs & Vice Provost for Inclusion and Diversity

Increasing Diversity in Science: Concrete Steps
- Dr. Sally Morton, Dean, College of Science

The Promotion and Tenure Process
- Dr. Jack Finney, Vice Provost for Faculty Affairs

Constituent Reports
- Mr. Seyi Olusina, Undergraduate Student Representative to the Board
- Mr. Brett Netto, Graduate Student Representative to the Board
- Mr. Robert Sebek, Staff Representative to the Board
- Dr. Hans Robinson, Faculty Representative to the Board

Annual Cycle of BOV Agenda Items
- Mr. Dennis Treacy, BOV Rector

Industry Partnerships and Technology Transfer

Updates, Facts and Figures, Actions | June 2018

Advancement & Research and Innovation

https://vtnews.vt.edu/articles/2018/03/fog-harp-increases-water-collection-capacity.html

VIRGINIA TECH

Discovery

Sponsored Programs
& Philanthropic Gifts

Discovery … to Market

Sponsored Programs & Philanthropic Gifts

Technology Commercialization

Intellectual Property

University owns all rights on IP discovered under government-funded research

University IP is licensed to:

- Established companies
- University start-up ventures

The terms of the licensing deal include royalty fees and/or equity stakes

Royalty Streams

A percentage of gross or net revenues derived from the use of an asset or a fixed price per unit sold of an item

Equity Streams

A share of the (future) profits on sale of a new venture

Discovery … to Market

Sponsored Programs & Philanthropic Gifts

Technology Commercialization

Intellectual Property

For industry-funded programs, the parties generally agree to the rights of any future IP created before the program begins.

Licensing terms typically consider the industry investment in the research:

- Non-exclusive or exclusive
- Royalty or non-royalty bearing
- Restricted field of use or all fields of use

Generally limits the licensing revenue to the university and inventors, and restricts the use of the IP in new ventures.

Federal and industry-supported research at Virginia Tech

FY16 Federal Expenditure Rank – 61st

Total	Federal		Total	Federal
1	1	Johns Hopkins U.[a]	2,431,180	2,104,653
5	2	U. Washington, Seattle	1,277,679	946,787
2	3	U. Michigan, Ann Arbor	1,436,448	786,749
9	4	Stanford U.	1,066,269	694,693
3	5	U. Pennsylvania	1,296,429	655,791
63	50	U. Utah	350,212	233,652
72	51	Oregon Health U.	331,524	232,688
71	52	Colorado State U.	331,862	232,108
52	53	U. Cincinnati	430,579	231,817
37	54	Purdue U., West Lafayette	606,302	229,093
46	55	U. South Florida, Tampa	505,965	228,365
45	56	Indiana U., Bloomington	508,766	221,801
44	57	Arizona State U.	518,239	212,396
56	58	U. Virginia, Charlottesville	397,458	210,980
58	59	U. Maryland, Baltimore	393,876	205,988
47	60	North Carolina State U.	489,918	202,336
43	61	Virginia Tech	521,773	195,859
62	62	U. Miami	358,441	195,328
74	63	Carnegie Mellon U.	319,168	190,620
77	64	U. Hawaii, Manoa	304,476	190,336
78	65	Albert Einstein C. of Medicine	300,909	188,521

FY16 Industry Expenditure Rank – 28th

Total	Industry		Total	Industry
10	1	Duke U.	1,055,778	232,793
75	2	SUNY, Polytechnic Institute	316,680	167,935
14	3	MIT	946,159	159,451
22	4	Ohio State U.	818,464	127,731
3	5	U. Pennsylvania	1,296,429	116,812
13	20	Cornell U.	974,199	50,096
42	21	U. Alabama, Birmingham	537,825	50,040
37	22	Purdue U., West Lafayette	606,302	47,810
40	23	Mt. Sinai Medical	540,296	47,474
25	24	Ga Tech	790,706	46,477
27	25	U. California, Davis	741,892	46,166
16	26	Texas A&M	892,718	44,707
5	27	U. Washington, Seattle	1,277,679	43,396
43	28	Virginia Tech	521,773	40,349
33	29	U. Illinois, Urbana-Champaign	625,180	39,355
24	30	U. Florida	791,294	39,263
29	31	Northwestern U.	713,491	38,306
50	32	U. Colorado Denver	443,705	36,608
30	33	U. Southern California	702,866	34,800
31	34	Vanderbilt U.	640,842	34,392
35	35	Emory U.	614,527	34,223

VIRGINIA TECH

Discovery to Market – a platform for engagement and growth

DISCOVERY TO MARKET

Responsibilities

LINK Center for Advancing Industry Partnerships

- Holistic approach to industry engagement
- Relationship management
- Sponsored programs business terms
- Philanthropic giving
- Strategic concept and proposal development
- Faculty engagement, education, culture

- Patentability assessments and whitespace analysis
- Patent filings, prosecution, maintenance
- Agreement administration and management
- Accounting and fund distribution

Intellectual Property Management

within a VT affiliated corporation

LINK – the essentials

- Founded in Summer 2017 as a Presidential Priority
- Partnership between Research, Advancement, Colleges, Institutes
- Replaced Corporate and Foundation Relations and selected staff in Research and Innovation
- Recruited Executive Director, Dr. Brandy Salmon, with 20+ years of business development and innovation management experience
- Center has been staffed with Director, two Associate Directors, and two Project Coordinators
- Key operations are underway and team is supporting full range of industry engagement activities

Industry partnership highlights at Virginia Tech

https://media.ford.com/content/fordmedia/fna/us/en/news/2017/09/13/ford-virginia-tech-autonomous-vehicle-human-testing.html

As member of selected group of universities, Virginia Tech excels as a Ford Alliance Partner, continuing to win numerous sponsored research programs as part of competitive award process.

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One of the largest companies producing farm equipment globally, Mahindra Group, joins the Virginia Tech Corporate Research Center to become its largest internationally headquartered tenant and begins comprehensive sponsored research partnership with Virginia Tech.

Mahindra

VIRGINIA TECH

Block.one donated $3M to support a new curricula to enhance blockchain programming skills. The first step in what we hope will be a comprehensive partnership and platform for blockchain education and research.

block.one

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Qualcomm maintains its support for Think-a-bit Labs, which has touched ~5000 students and teachers, primarily from underserved and underrepresented communities in the D.C. area since its inception in 2016. The Labs are a model for pathway programs supported through industry-university partnership.

Qualcomm

VIRGINIA TECH

Tech Transfer is important to Virginia Tech

01 Faculty and student recruitment and retention

02 Value creation and knowledge dissemination

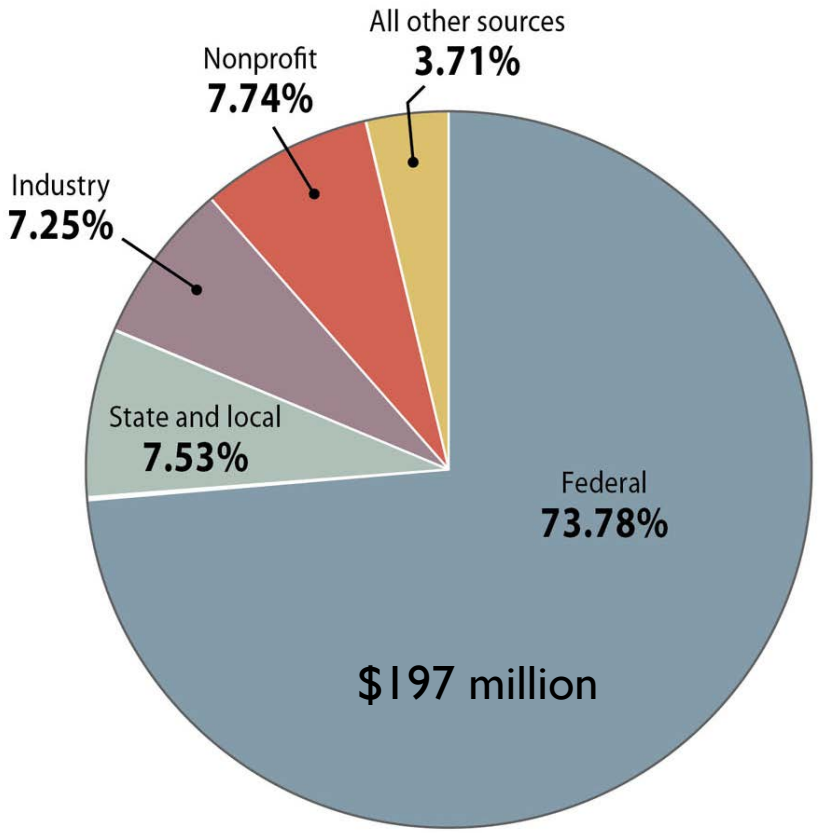
03 Entrepreneurial initiatives and culture

04 Bayh-Dole Act to protect and promote IP created with federal funding

05 Economic development and public good

06 Commitments to the community and the Commonwealth

Bayh-Dole Act requires universities that accept federal dollars to provide technology transfer support



> Perhaps the most inspired piece of legislation to be enacted in America over the past half-century." - Economist, 2002

Non-profits including Universities

- Elect to retain title to innovations developed under federally funded research
- Promote use of inventions
- File patents on inventions they intend to own
- Give licensing preferences to small business

Federal Government

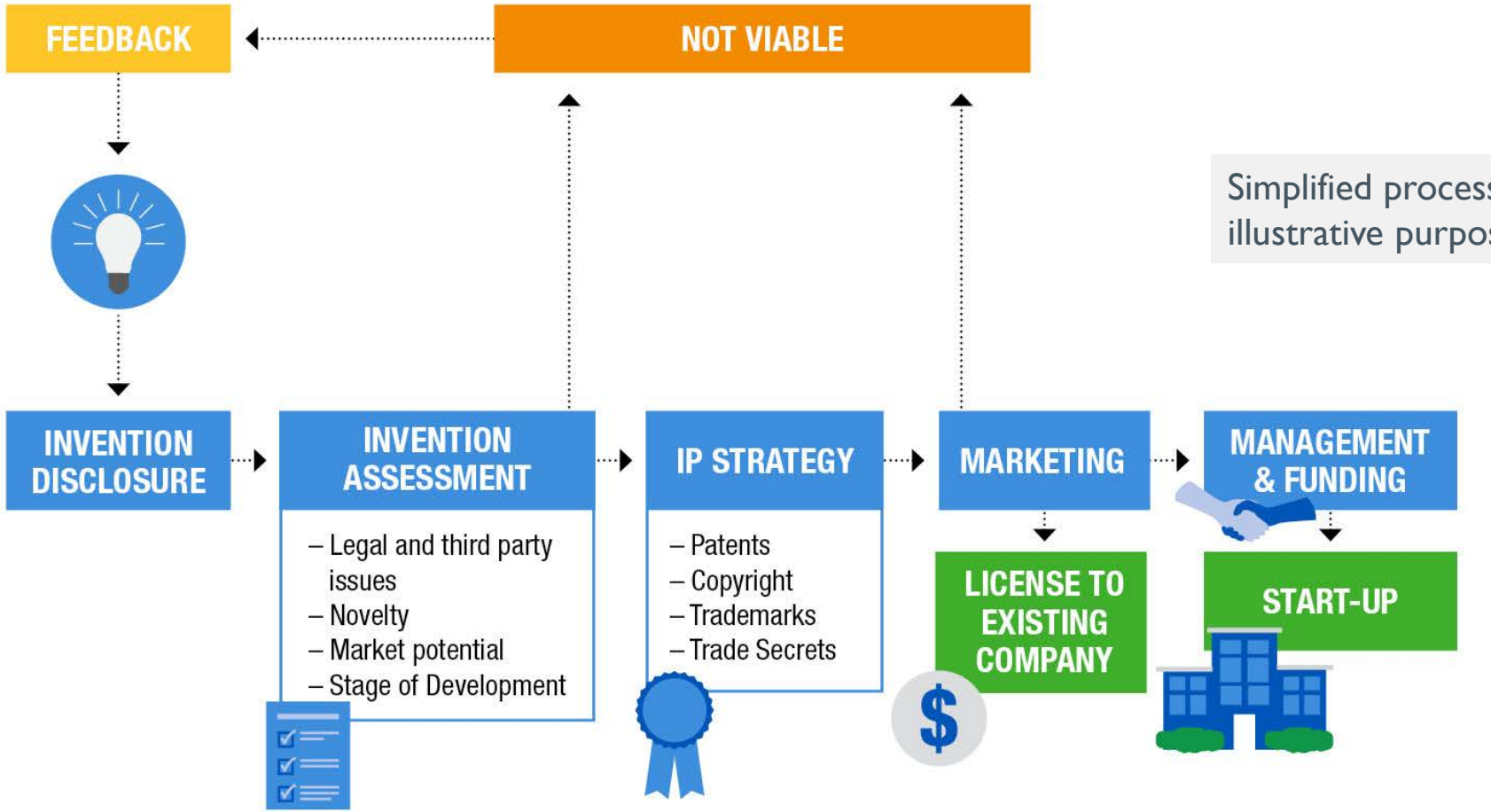
- Retains non-exclusive license to practice
- Retains march-in rights

Virginia Tech is committed to supporting economic development and impact in the Commonwealth and beyond

"One of the things that is important to me and to Tim Sands is we don't want VTC to be the end game. We are the catalyst for innovation, entrepreneurism and economic growth for this region. That's where we see the end game as more a continued growth and change, and real excitement to grow the economy."

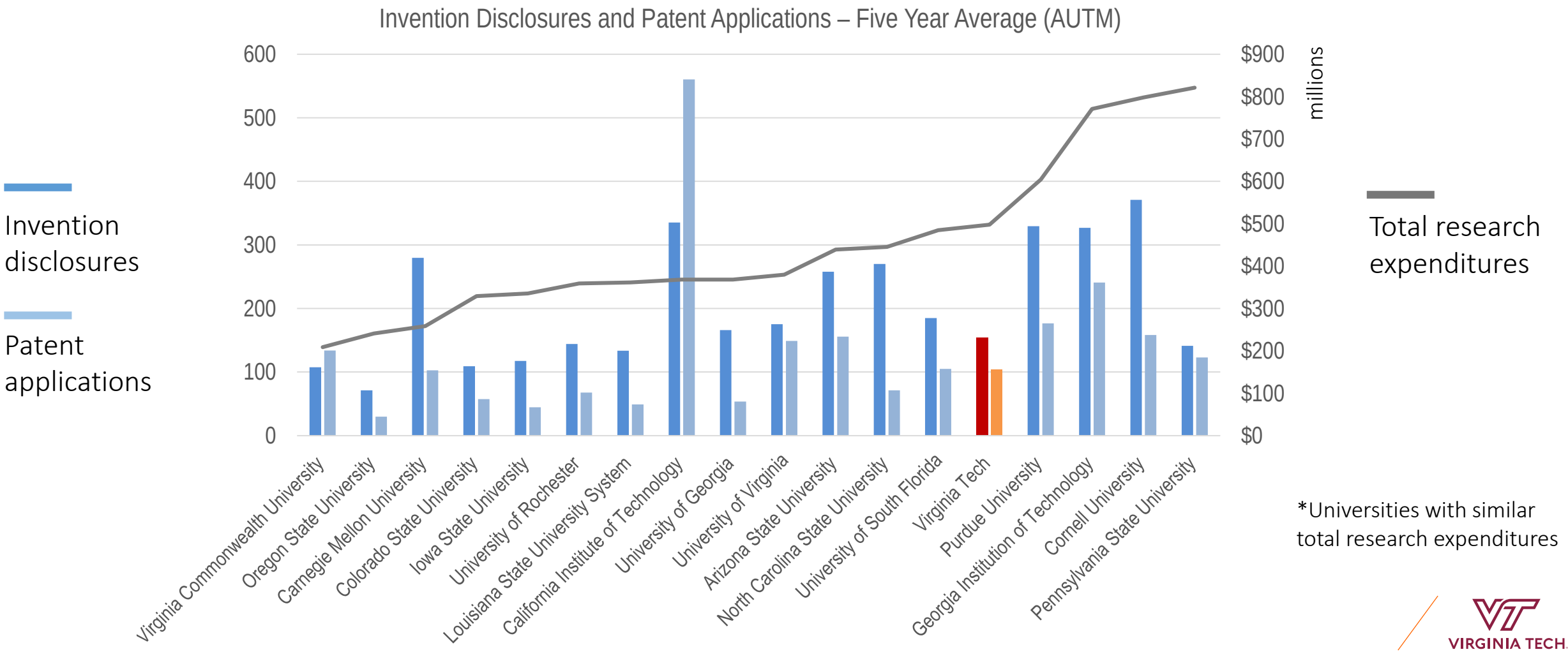
-- Carilion CEO Nancy Agee, Roanoke Times, October 2017

An effective and efficient intellectual property and marketing strategy is essential for successful technology commercialization efforts



Simplified process for illustrative purposes

Virginia Tech's disclosure of technologies and patent applications relative to others illustrates the pipeline



*Universities with similar total research expenditures

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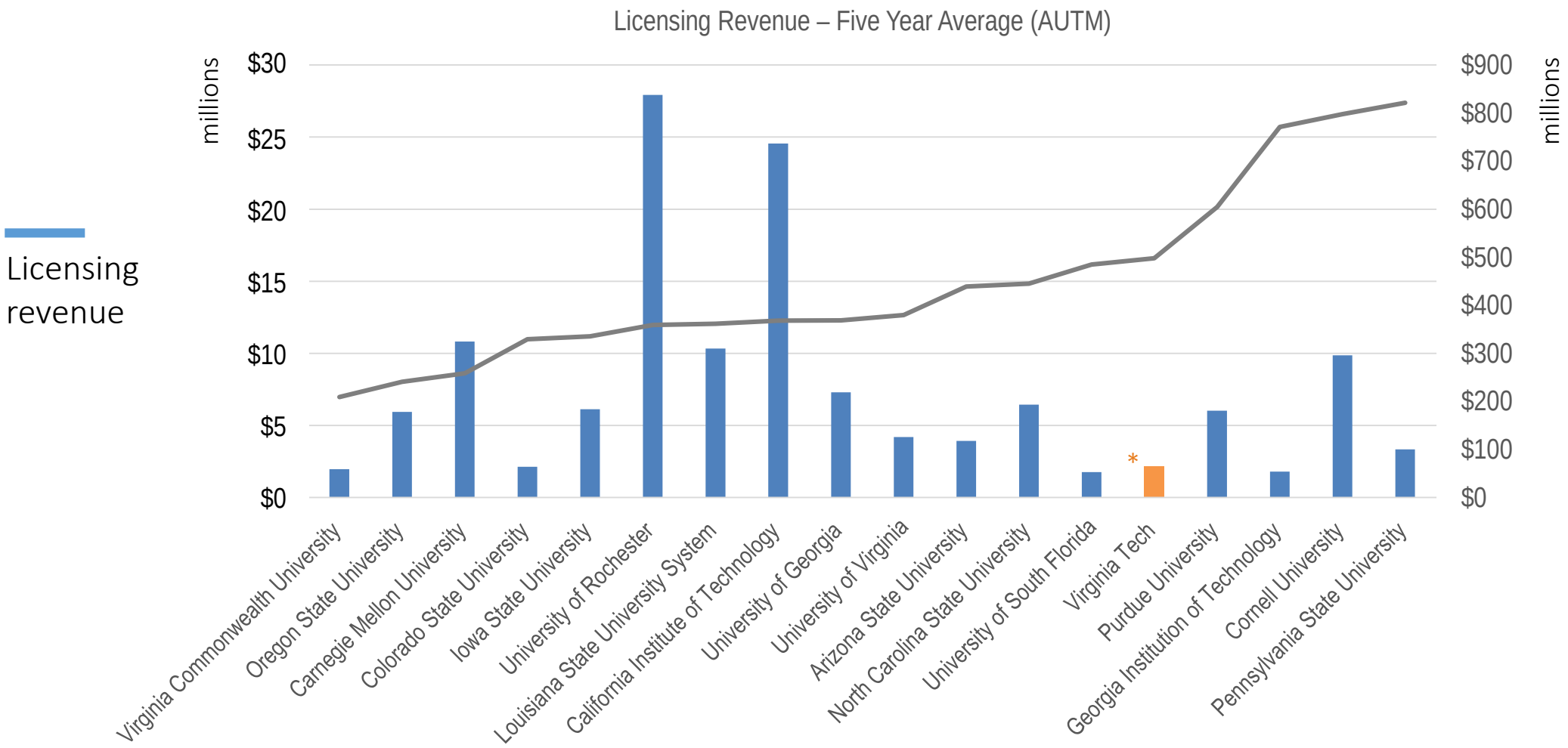
Virginia Tech's licensing revenue provides one measure of value creation



Licensing Revenue

Northwestern = $200M
Princeton = $135M
UC System = $130M
UT System = $88M
MIT = $70M
Stanford = $45M

* ~50% of current licensing revenue is from the small grain breeding program

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Virginia Tech's portfolio of non-agriculture agreements illustrate prior decisions and trade-offs

Non Agriculture

192	Total active agreements
65%	Percent that are royalty-free
~60	Total number of agreements with any chance of royalty

Agriculture

50	Total active agreements
100%	Percent with chance of royalty
~20%	Percent of royalties from seed-related agreements available to support IP management

Attachment U

Industry Affiliate Programs offer pre-competitive research and technology development to industry partners

80+ Industry Members

form the CPES Industry Affiliate Program with annual membership dues between $25K - $50K

- Established in 1998 as an NSF-funded Engineering Research Center, the Center for Power Electronics Systems (CPES) is now a Virginia Tech Industry Affiliate Program
- 80+ members pay dues in exchange for non-exclusive royalty free licenses to IP, which is supported by membership dues
- The large patent estate (50+ awarded patents) includes technologies that can be found in virtually every mobile device and many other notable inventions

VIRGINIA TECH

The seed-related agriculture portfolio illustrates (a) impacts of decisions on future investment and (b) areas of strength

Non Agriculture

192	Total active agreements
65%	Percent that are royalty-free
~60	Total number of agreements with any chance of royalty

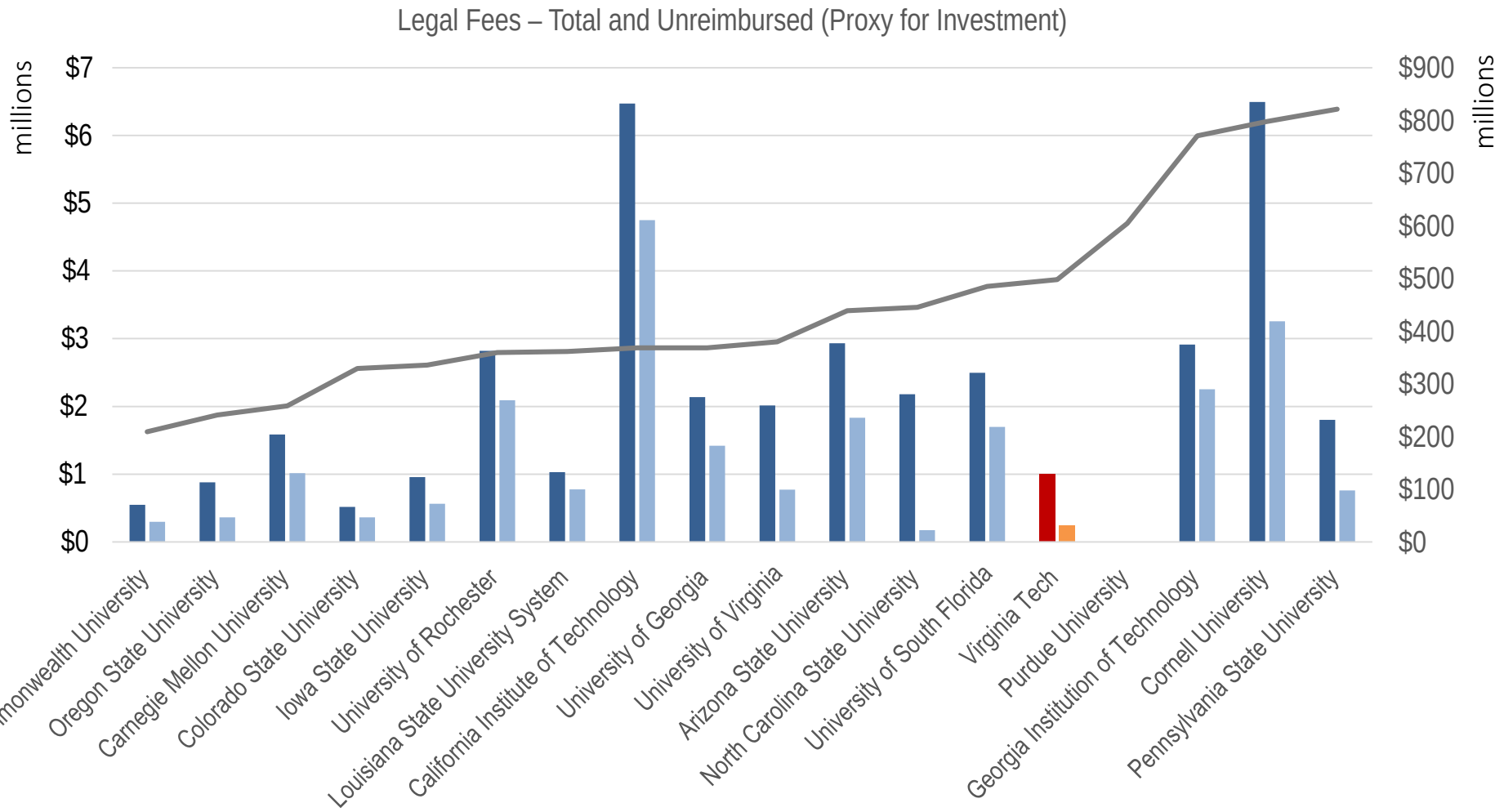
Agriculture

50	Total active agreements
100%	Percent with chance of royalty
~80%	Percent of royalties from seed-related agreements are returned to support the small grain seed program; not available to support IP management

Unreimbursed legal fees serve as a proxy for investment

Total legal Fees

Unreimbursed legal fees



Total research expenditures

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Discovery to Market – a platform for engagement and growth

DISCOVERY TO MARKET

Responsibilities

LINK Center for Advancing Industry Partnerships

- Holistic approach to industry engagement
- Relationships with industry contacts
- Sponsored program business terms
- Philanthropic giving
- Strategic concept and proposal development
- Faculty engagement, education, culture

LAUNCH Center for New Ventures

- Support for entrepreneurs and start-ups
- Relationships with angel and venture investors
- Proof-of-Concept grant (with VRIC)
- Entrepreneur-in-Residence (EIR) program
- Alumni and community engagement
- Technology showcases and marketing

- Patentability assessments and whitespace analysis
- Patent filings, prosecution, maintenance
- Agreement administration and management
- Accounting and fund distribution

Intellectual Property Management

within a VT affiliated corporation

VIRGINIA TECH

Ongoing efforts are driving enhancements to technology transfer and commercialization at Virginia Tech

1. Integrate tech transfer function with other Virginia Tech teams, including industry partnerships, new ventures, sponsored programs, colleges, and institutes.
2. Create an affiliation agreement and funding model that aligns with university goals.
3. Move beyond risk averse culture focused on administrative functions and process to one that values innovation and growth.
4. Refocus away from late-stage agreement management to proactive identification of market needs, partners, applications, and engagement.
5. Identify funding to support technology commercialization efforts and start-ups.

Strategic Planning Update

Menah Pratt-Clarke
Vice President for Strategic Affairs

Strategic Planning Process Update
June 2018

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Office for Strategic Affairs

The Big Picture:

Developing the Process and Framework

- **Information gathering and collaboration.**
  - January – April 2018 Retreats, committee meetings, collaboration with university units.
- **Develop mission, vision, core values and objectives.**
  - March 2018 – Draft mission, vision, core values and objectives, develop communication strategy, workgroups and university presentations to subcommittees.
- **Campus engagement and communication.**
  - April and May 2018 – Engage and inform campus of the strategic planning process.

Committee Presentations and Discussions (January to May)

Metrics In Academia
(Ron Fricker)

HUME
(Charles Clancy)

Rankings and Metrics Indicators
(James Harder, Mallory Miller)

Destination Areas
(Marcia Davitt)

PIBB
(Jeff Earley)

Research
(Theresa Mayer)

Biocomplexity Institute
(Chris Barrett)

Institute for Society Culture and Environment
(Karen Roberto)

Virginia Tech Transportation Institute
(Tim Dingus)

Institutional Research
(Roxanne Gile, Abhay Joshi)

Financial Resource Metrics
(Savita Sharma)

Institute for Creativity Arts and Technology
(Ben Knapp)

Academic Affairs Metrics
(Ken Smith)

Auxiliary Budget Process
(Tim Hodge)

FRALIN
(Dennis Dean)

Assessment and SACS Accreditation
(Jaime Williams, Bethany Bodo)

Institute for Critical Technology and Applied Science
(Stefan Duma)

Campus Engagement Activities

April thru May 2018

Commission on Administrative and Professional Faculty Affairs

Alumni

Commission On Staff Polices and Affairs

Commission on Research

Commission on Faculty Affairs

NCR Senior Management Team

NCR Academic Faculty and Program Directors

Department Heads Executive Committee

Division of IT

Commission on Student Affairs

Council of College Deans

Graduate Student Affairs

Commission on Equal Opportunity and Diversity

Student Government Association

VTCRI (Roanoke)

University Council

Town Halls

Faculty Senate

Staff Senate

Commission on Outreach and International Affairs

Commission on Undergraduate Studies and Policies

Commission on University Support

Commission on Graduate Studies and Policies

President's Council Meeting

Draft Vision

An inspirational and aspirational statement of what we want to become

Virginia Tech positively transforms lives and communities and inspires the world in the spirit of its motto, *Ut Prosim* (That I May Serve).

Draft Mission

How the vision will be achieved

As a comprehensive global public land grant university, Virginia Tech positively transforms lives and communities in the spirit of its motto, Ut Prosim, by creating, conveying, and applying knowledge, technology, and experiences within the Commonwealth of Virginia and throughout the world.

Draft Strategic Objectives

The key principles that support the vision and mission

Land Grant Experience

hing and learning, research and discovery,
n areas of the Commonwealth of Virginia, the

nation through economic development,
fication, and lifelong learning opportunities.

on, discovery, innovation, and the creative
Commonwealth of Virginia, the nation, and the

Promote the institutional and individual commitment to community, diversity, and inclusion in accordance with the Principles of Community and InclusiveVT.

Draft Strategic Objectives

The key principles that support the vision and mission

Student Success

e teaching and learning and holistic
o-curricular experiences, to be
aged, and equipped to be of service

, innovative, and collaborative

ize the talents and influence of
Virginia Tech alumni.

Draft Strategic Objectives

The key principles that support the vision and mission

Financial Sustainability

Identify and manage new, diverse, and susta
versatile and robust financial management m

Campus of the Future

Create and sustain an infrastructure (physica
that provides dynamic learning and discovery
through a technology-enhanced, data-enable
network of campuses.

Continuous Planning and Assessment

Integrate continuous planning, evaluation, ar
organizational capacity for agile, flexible, anc
operational effectiveness.

Draft Core Values

The foundation for the vision, mission, and strategic objectives

cores our commitment to service
ms.

s.

diverse ideas, peoples, and
of individuals in order to contribute
orld's communities.

able educational opportunities for
stent with its land-grant mission.

Draft Core Values

The foundation for the vision, mission, and strategic objectives

Collaboration.

We value collaboration and the collec
approaches and perspectives to addr

Mutual Respect and Open Express

We support and promote open expres
respect.

Ethics and Integrity.

We expect the university and its mem
standards of integrity and ethical beha
professionally.

Draft Core Values

The foundation for the vision, mission, and strategic objectives

Lifelong Learning.

We value lifelong learning and inquiry
for personal growth and to promote th
to enhance society.

Discovery and Innovation.

We value research, innovation, and th

Freedom of Inquiry and Academic

We value freedom of inquiry and an e
excellence.

Continuous Evaluation.

We value continuous evaluation and i
and institutional objectives.

Summer Work Plan

- Refine and revise vision, missions, values, and objectives

- Develop white paper on metrics and rankings
- Begin to identify high-level goals for strategic objectives

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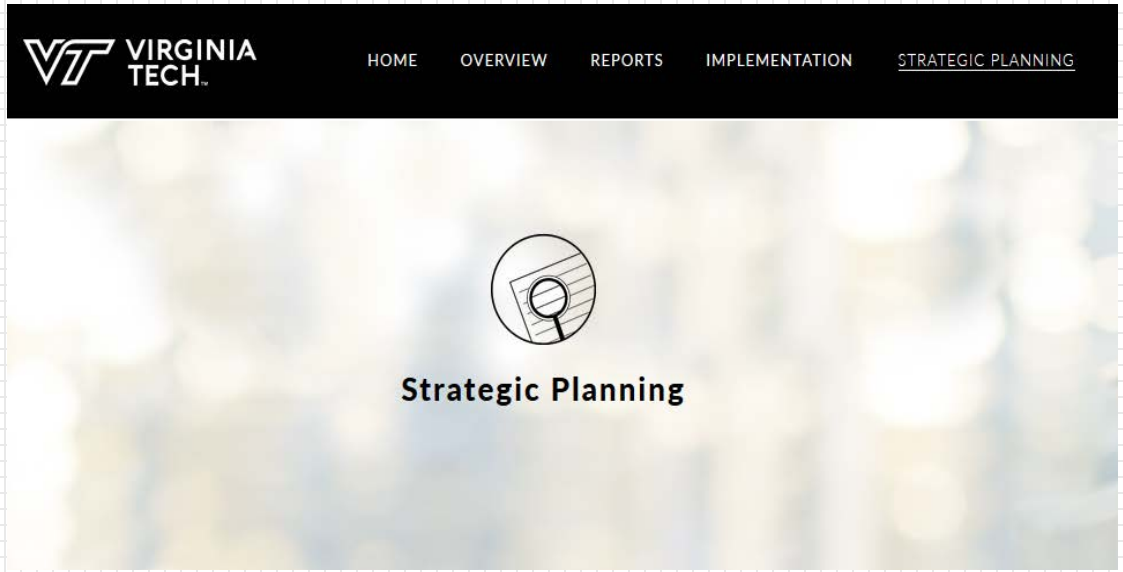
Questions


VIRGINIA TECH
HOME
OVERVIEW
REPORTS
IMPLEMENTATION
STRATEGIC PLANNING
Strategic Planning

Attachment U

Virginia Tech

BOV Update from May 3, 2018 Town Hall on Diversity

Tim Sands, President

Menah Pratt-Clarke,
Vice President for Strategic Affairs
Vice Provost for Inclusion and Diversity

VIRGINIA TECH

Inclusion and Diversity at Virginia Tech

Where we've been, Where we're going, How we're making a difference

VIRGINIA TECH

The national conversation on diversity

VIRGINIA TECH

InclusiveVT: Institutional and individual commitment to *Ut Prosim* in the spirit of community, diversity, and excellence. (May, 2016)

Attachment U

Diversity Strategic Goals:

- Institutionalizing structures that promote sustainable transformation
- Increasing faculty, staff, and student diversity
- Ensuring a welcoming, affirming, safe, and accessible campus climate
- Preparing students for service through an understanding of issues of identity, the human condition, and life chances.

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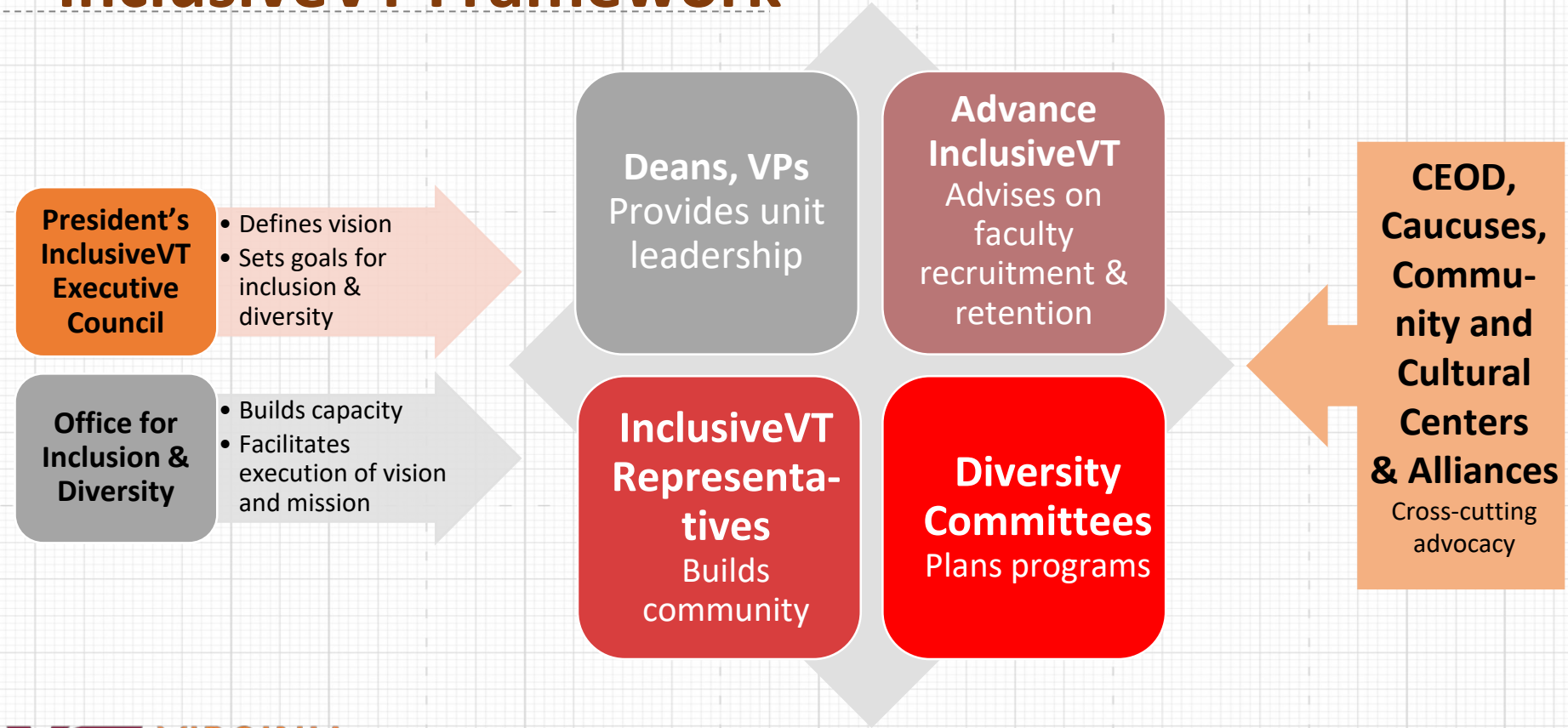
Impact Overviews

Institutionalizing structures that promote sustainable transformation

VIRGINIA TECH

InclusiveVT Framework

Attachment U



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Diversity Strategic Planning (2017-2018)

Attachment U

Accelerating Diversity Outcomes

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Compositional Diversity

Increasing faculty, staff, and student diversity

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Project 2022

Fall 2022
25% URM
40% URM/USS

Fall 2017
13% URM
30% URM/USS

- Fall census of entering undergraduate class, including first-year and transfer students
- URM = UnderRepresented Minority
- USS = UnderServed Students (First-generation & Pell)
- URM/USS not double-counted

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New Leadership (2017)

Increase in underrepresented and underserved applications

Admissions restructuring, non-cognitive factors, pipeline programs, life experiences, leadership, overcoming obstacles

Luisa Havens, Vice Provost

Juan Espinoza, Associate VP

Alphonso Garrett, Director, Diversity

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Enrollment Management Outreach Programs

- Hispanic College Institute Pre-College Program
- Native American Pre-College Outreach
- College Access Collaborative Summer Programs
- Black College Institute Pre-College Program

VIRGINIA TECH

Student Success Flow

Attachment U

Outreach

Recruitment

Orientation

Student Academic Support

Student Engagement

Student Career Planning

Graduation!

College Access Collaborative

Enrollment Management

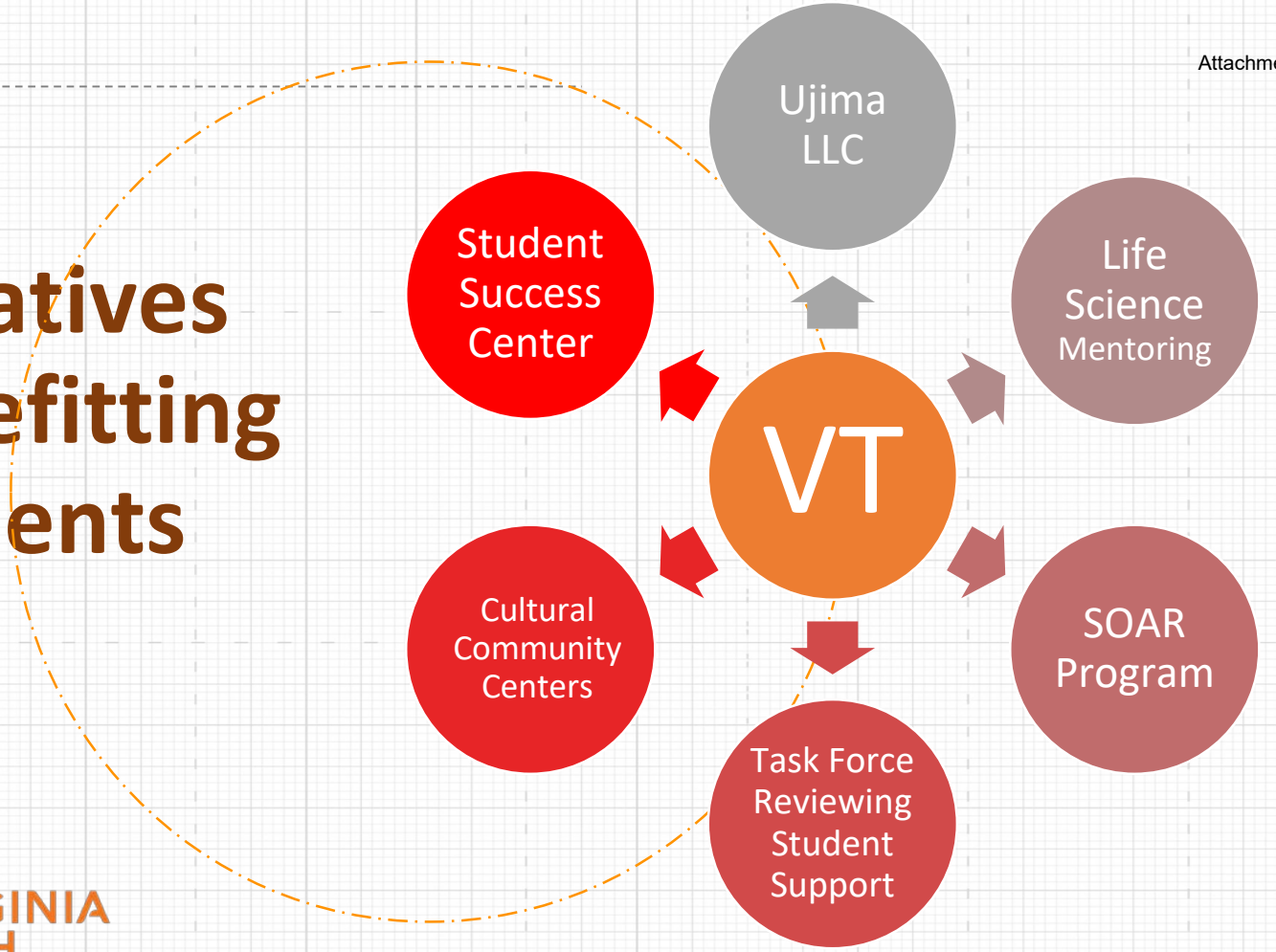
Student Success Center

Undergraduate Research & Experiential Learning

Career Services

VIRGINIA TECH

Initiatives Benefitting Students



VIRGINIA TECH

Retention Support

Attachment U

- FINANCIAL AID AND SCHOLARSHIPS (Beyond Boundaries, InclusiveVT Excellence Fund)
- TUTORING / MENTORING (Cultural Community Centers, Student Success Center)
- SOAR (Student Opportunity and Achievement Resources)
- The Commonwealth of Scholars (Academic Excellence)

VIRGINIA TECH

Faculty Hiring

Attachment U

- Target of Talent
- Future Faculty Fellows
- Advance InclusiveVT
- Diversity Search Advocates

Actions

DiversityEdu
For Faculty Searches

- **75%** completion

- **30** Underrepresented hires *anticipated*

2017-18

VIRGINIA TECH

Education and Training Overview

Ensuring a welcoming, affirming, safe, and accessible campus climate

VIRGINIA TECH

DiversityEdu

Attachment U

Providing a common knowledge and basic foundation around diversity and inclusion consistent with Ut Prosim and the Principles of Community.

Year One-2016

5571 students

93.1% completion

Year Two - 2017

7201 students

99.5% completion

Looking Forward: **100% completion**

Extending the DiversityEdu message through face-to-face dialogue in FYE, HRL, and IEC

VIRGINIA TECH

Strategic Diversity Education:

Tied to the InclusiveVT mission and goals:

- transformational infrastructure,
- compositional diversity,
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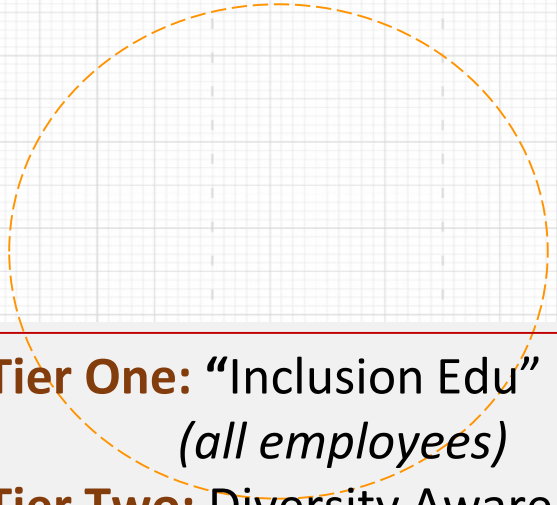

Tier One: "Inclusion Edu"
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(open enrollment)

Tier Three: Capacity Building + Inclusive Excellence
(targeted cohorts)

VIRGINIA TECH

Diversity Programming

Attachment U

Generative

Mission-focused

Responsive

2015 Reading Groups

2016 Unfinished Conversations

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2018 Courageous Conversations

VIRGINIA TECH

Impact on the Academic Mission

Preparing students for service through an understanding of issues of identity, the human condition, and life chances.

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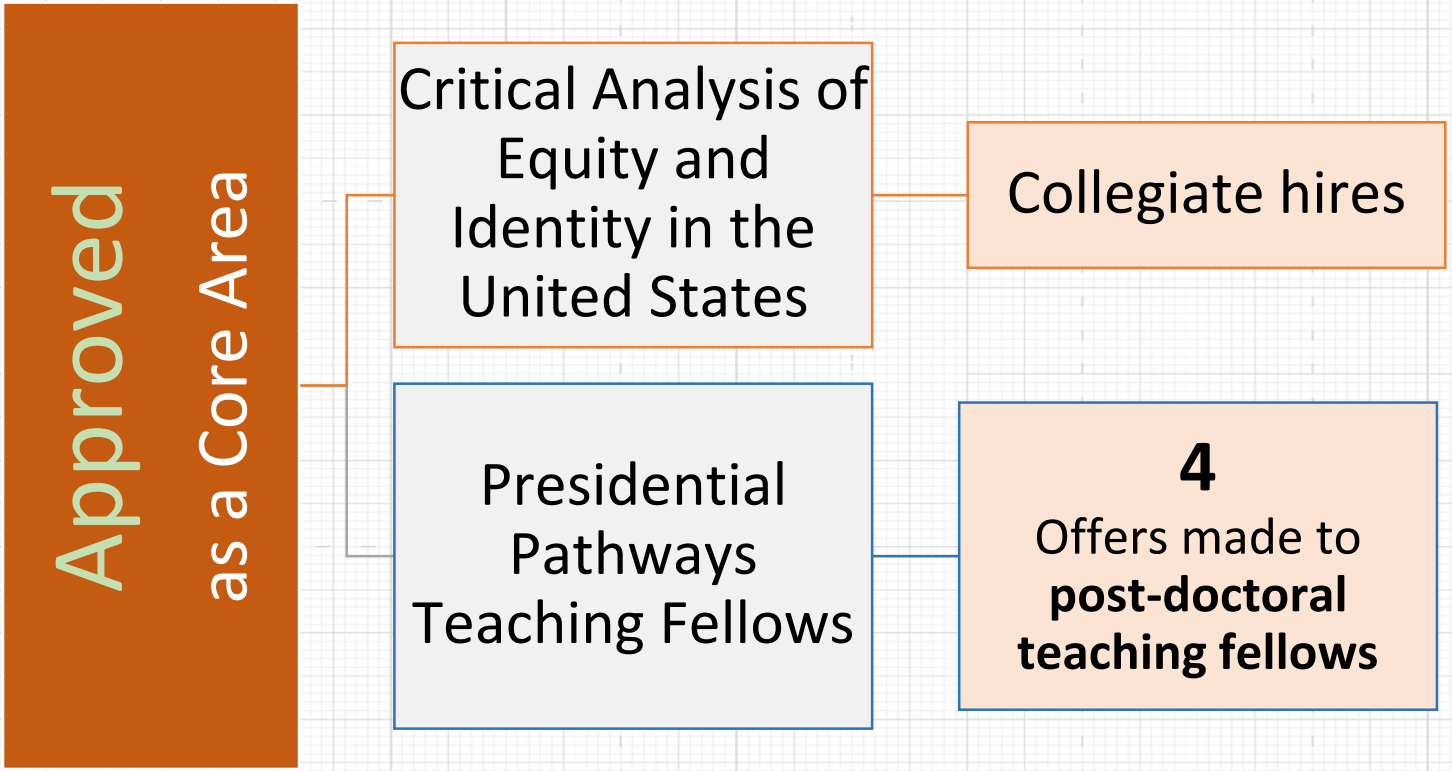
Pathways: General Education at VT

Attachment U



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Beyond General Education

Attachment U

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What's Next

- Integration of diversity into university strategic planning framework
- Focusing on capacity-building around diversity competency
- Continuing faculty diversity recruitment momentum and focusing on retention
- Developing comprehensive strategies for student success
- College/Unit Accountability with Diversity Plans

Increasing Diversity in Science: Concrete Steps

Consensus

Leadership

Commitment

Implementation

Sally C. Morton, Dean

VIRGINIA TECH | COLLEGE OF SCIENCE

"Who we are, where we come from, and what we've experienced influence the way we perceive issues and solve problems. I think the most diverse group will produce the best product."

Tim Cook, CEO, Apple

Consensus: The College of Science Values Diversity

Equitable

Essential

Pragmatic

Leadership

Michel Pleimling has been named Director of Inclusion and Diversity for the College of Science, with a mission of helping create a faculty, student body, and community that is diverse and welcoming.

"We know that new challenges require new thinking and continued innovation. That's why embracing diversity and inclusion is not just a nice-to-have, but rather a business priority."

-Mary Barra, CEO, General Motors

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Our Initial Focus: Increasing Faculty Diversity

The College committed philosophically, procedurally, and financially to increasing the number of under-represented minority faculty.

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Our Ongoing Commitment

Faculty
Students
Staff
Education
Pipeline

AdvanceVT
InclusiveVT

College
Diversity
Committee

Departmental
Committees

Women In The Sciences

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Our Initial State: Fall 2016

298 Instructional Faculty

- Biological Sciences
- Chemistry
- Economics
- Geosciences
- School of Neuroscience
- Academy of Integrated Science
- Mathematics
- Physics
- Psychology
- Statistics

Faculty Characteristics	Number and Percent (Fall 2016)
Women	92 (31%)
White	232 (78%)
Asian	49 (16%)
Hispanic	10 (3%)
African American	5 (2%)
American Indian or Alaska Native	2 (1%)

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Science's Current State

Doctorates earned by African Americans in the U.S. in 2016	Number and Percent (NSF Survey of earned Doctorates)
Psychology	233 (6.9%)
Chemistry	65 (4.1%)
Mathematics or Statistics	36 (3.8%)
Economics	18 (3.5%)
Geosciences	10 (1.2%)

66 African American women received a PhD in Physics in the U.S. between 1972 and 2012. During that time, 22,172 white men did.

Implementation: Creative Approaches

Institutionalizing our structure to promote sustainable transformation

- Committing College hiring lines
- Bridging post-docs
- Fellowships and scholarships
- Outreach

"We will make progress every year towards building a more diverse workforce and creating opportunities at every level of the company for all of
Microsoft's employees."

-Satya Nadella, CEO, Microsoft

Projected Results Fall 2018

Projected increases in Tenured, Tenure-track and Collegiate Faculty:

- 13 women
- 2 African Americans
- 2 Hispanics

Virginia Tech
Town Hall on Diversity
May 3, 2018

Tim Sands, President

Menah Pratt-Clarke,
Vice President for Strategic Affairs
Vice Provost for Inclusion and Diversity

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The national conversation on diversity

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Inclusion and Diversity at Virginia Tech

Where we've been, Where we're going, How we're making a difference

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Virginia Tech Diversity Champion, 2016-2018

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Office of Inclusion and Diversity Team in 2016

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Office for Inclusion and Diversity Team in 2018

Attachment U

VIRGINIA TECH

Office for Inclusion and Diversity

Vision:

A just and inclusive society

Mission:

To serve as a catalyst for capacity building through InclusiveVT

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InclusiveVT: Institutional and individual commitment to *Ut Prosim* in the spirit of community, diversity, and excellence. (May, 2016)

Attachment U

Diversity Strategic Goals:

- Institutionalizing structures that promote sustainable transformation
- Increasing faculty, staff, and student diversity
- Ensuring a welcoming, affirming, safe, and accessible campus climate
- Preparing students for service through an understanding of issues of identity, the human condition, and life chances.

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Impact Overviews

Institutionalizing structures that promote sustainable transformation

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InclusiveVT Framework

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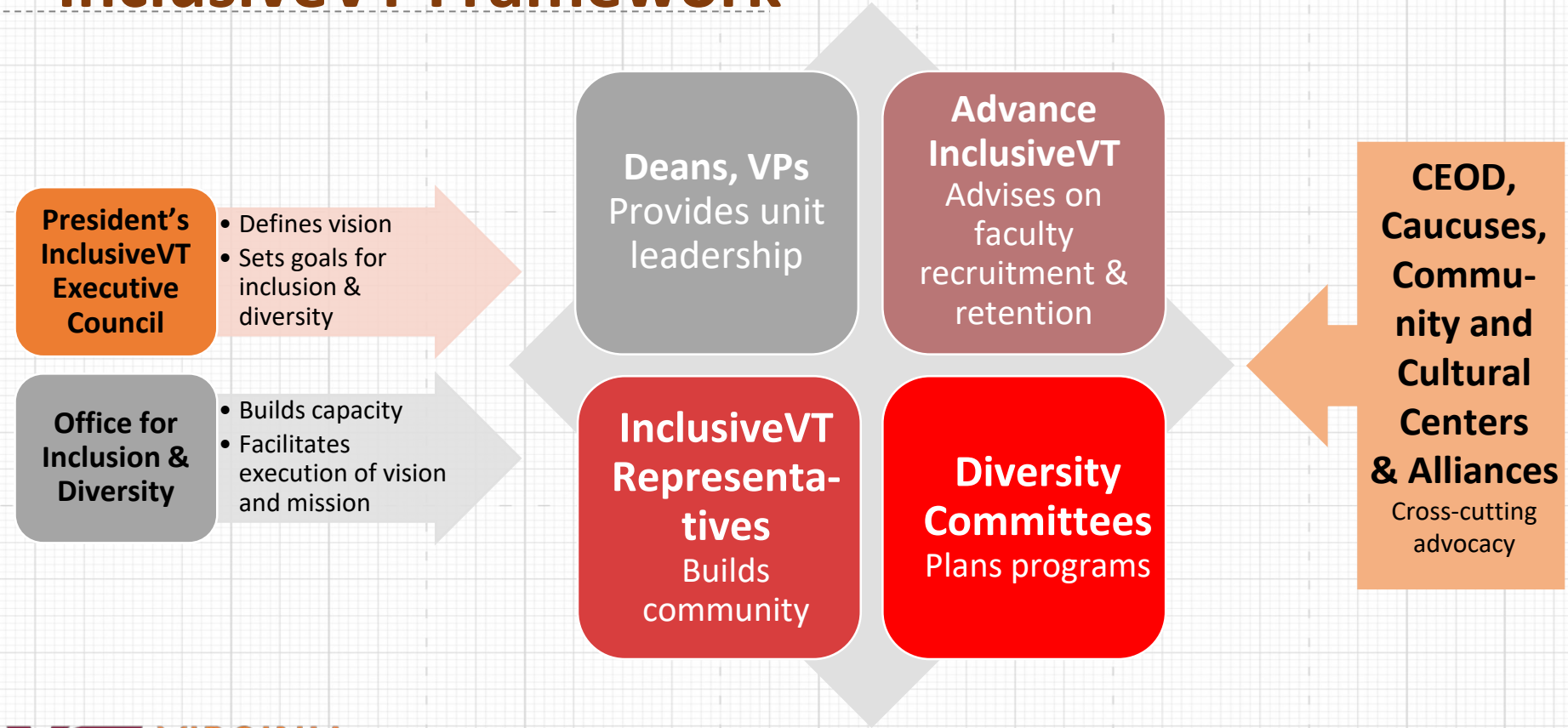

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Diversity Strategic Planning (2017-2018)

Attachment U

Accelerating Diversity Outcomes

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Governance

Attachment U

Commission on Equal Opportunity and Diversity

Advises President's InclusiveVT Executive Council

Recommends policies to University Council

F17 Letter in response to White supremacy

S18 Letter on the state of our Principles of Community

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Caucuses

American Indian and Indigenous

- Pow Wow
- Tribal Relations
- Indigenous People's Day

Asian / Asian American Caucus

Reviewing goals, objectives, vision

Black Caucus

- Student support
- Faculty concerns
- Staff concerns

Disability Alliance and Caucus

- Master Planning & Access
- Web accessibility

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Caucuses

Attachment U

LGBTQ Caucus

- LGBTQ+ Climate Survey
- Outreach
- Education

Hispanic / Latinx Caucus

- Support for DACA students
- Latinx Symposium Plans

Veteran's Caucus

- Veteran's Conference
- VetZone Support
- Advocacy for transitional support
- Admissions

Women's Caucus

- Four dialogues
- Gender@ VT
- Short, medium, long-term goals

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Compositional Diversity

Increasing faculty, staff, and student diversity

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Project 2022

Fall 2022
25% URM
40% URM/USS

Fall 2017
13% URM
30% URM/USS

- Fall census of entering undergraduate class, including first-year and transfer students
- URM = UnderRepresented Minority
- USS = UnderServed Students (First-generation & Pell)
- URM/USS not double-counted

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New Leadership (2017)

Attachment U

24% increase in Black student applications in year one!

Admissions restructuring, non-cognitive factors, pipeline programs, life experiences, leadership, overcoming obstacles

Luisa Havens, Vice Provost

Juan Espinoza, Associate VP

Alphonso Garrett, Director, Diversity

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Enrollment Management Outreach Programs

- Hispanic College Institute Pre-College Program
- Native American Pre-College Outreach
- College Access Collaborative Summer Programs
- Black College Institute Pre-College Program

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Black College Institute Pre-College Program

- Academic enrichment program
- High achieving, academically curious rising high school juniors and seniors
- Engages all academic colleges

600+ applicants for 2018!

(60 applicants for 2017)

BLACK COLLEGE INSTITUTE

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Student Success Flow

Attachment U

Outreach

Recruitment

Orientation

Student Academic Support

Student Engagement

Student Career Planning

Graduation!

College Access Collaborative

Enrollment Management

Student Success Center

Undergraduate Research & Experiential Learning

Career Services

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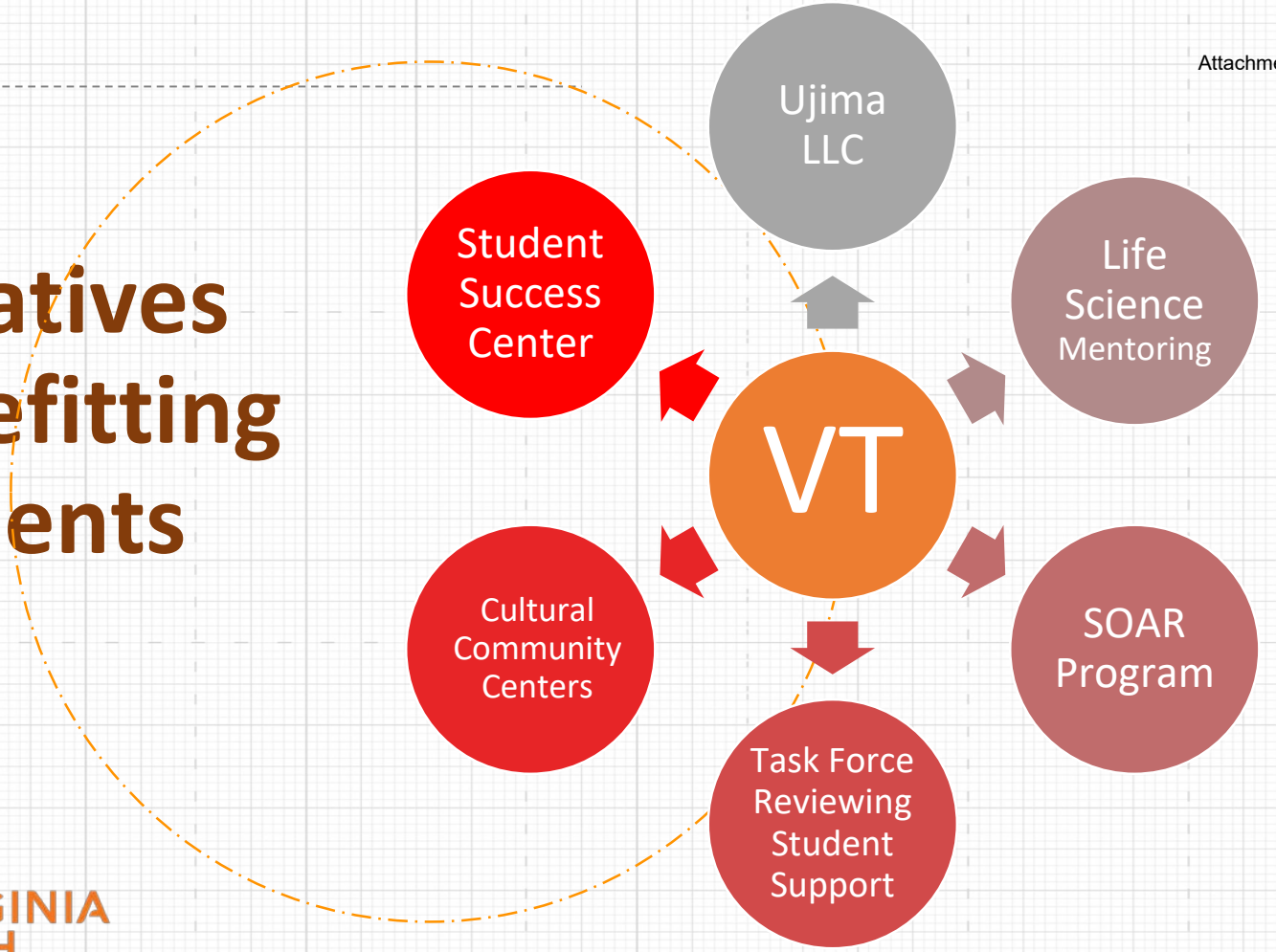
Initiatives Benefitting Students



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Retention Support

Attachment U

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Cultural and Community Centers

Creating conditions for student success.

Developing the cultural competence of every Virginia Tech student.

Yolanda Avent

Rhonda Rogers

Joseph Frazier

Veronica Montes

Luis Garay

Kimberly Williams

Advocacy
Advising
Awareness

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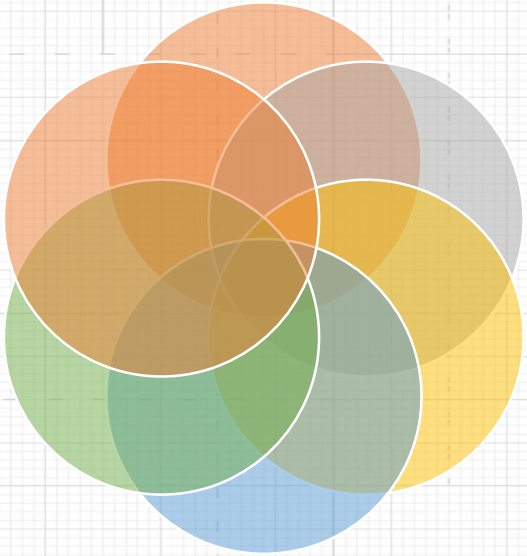
The Centers

Attachment U

American Indian & Indigenous Community Center (2016)

Asian American Cultural Center (2017)



Intercultural Engagement Center

El Centro (2016)

Black Cultural Center (1991)

LGBTQ+ Resource Center (2016)

Veteran's Center

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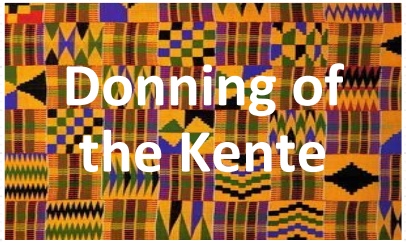
Cultural Achievement Ceremonies

Attachment U

Aliyah

American Indian & Indigenous

Asian American



International

Muslim

Students in Recovery

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Faculty Hiring

Attachment U

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2017-18

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Enhancing Faculty Diversity

Attachment U

PIBB

- Partnership for Incentive Based Budget
- Annual reporting by colleges and vice presidents
- Budget allocations for success
- Faculty Success Scorecard with diversity metrics

Cluster Hires

- Cluster ads and search committees
- Committees → diversity advocates & Advance InclusiveVT representatives

Advance VT

- Continued workshops & faculty programs promoting recruitment and retention

Education and Training Overview

Ensuring a welcoming, affirming, safe, and accessible campus climate

VIRGINIA TECH

DiversityEdu

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Diversity Development

Attachment U

Diversity Development

- Founded in **2011** at the recommendation of the **Task Force on Race and the Institution**

Allies and Advocates

- Currently **370 have completed at least 36 hours of diversity training** to receive their Ally certificate.

Strategic Diversity Ed

- Moving forward→ diversity education will align with InclusiveVT and its strategic goals.

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Strategic Diversity Education:

Tied to the InclusiveVT mission and goals:

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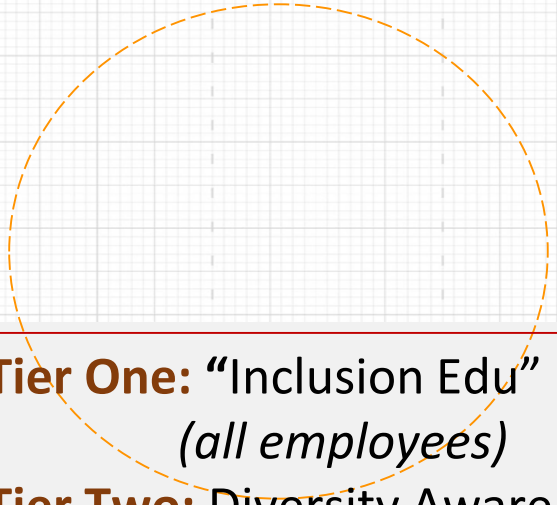

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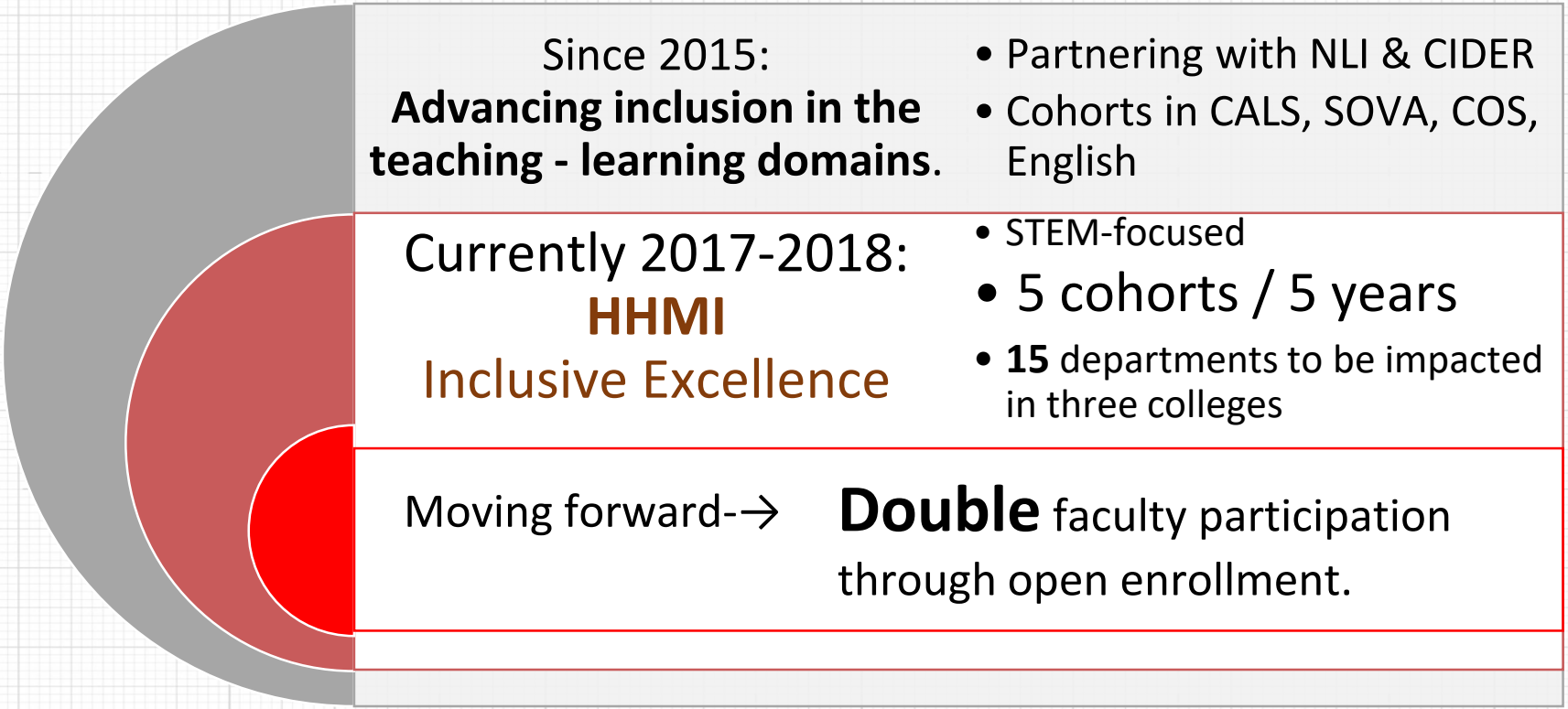
Inclusive Pedagogy

Attachment U



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Diversity Programming

Attachment U

Generative

Mission-focused

Responsive

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Faculty Women of Color in the Academy National Conference

Attachment U

400+ women from **35** institutions came to Virginia Tech to **Connect**

Support

Empower

In April 2017, 2018.

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Uplifting Black Men Conference

Attachment U

February 2016, 2017, 2018

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LGBTQ Programming

- Coffee & Tea with the LGBTQ+C - last Tuesday of every month
- LGBTQ+ History Month - October 1 to October 31, 2017
- LGBTQ+ Resource Center Open House - January 22, 2018
- Creating Change Conference - January 24 to January 28, 2018
- Pride Week 2018 - April 1 to April 7, 2018

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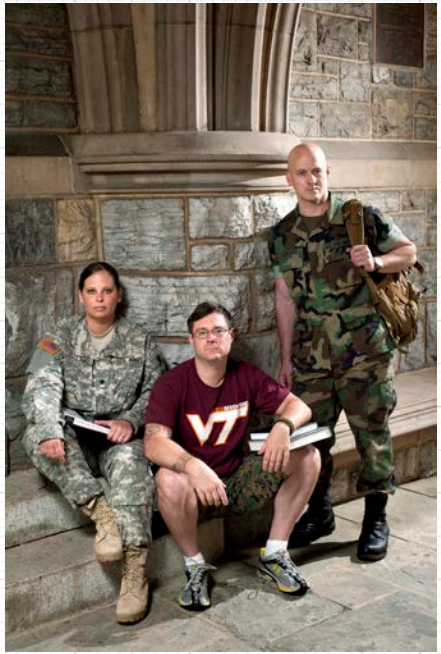
Veteran Awareness



- Nearly 200 veterans are enrolled at Tech - tackling the unique challenges that veterans can face on a college campus.
- Seeking recognition as Military Friendly School

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Impact on the Academic Mission

Preparing students for service through an understanding of issues of identity, the human condition, and life chances.

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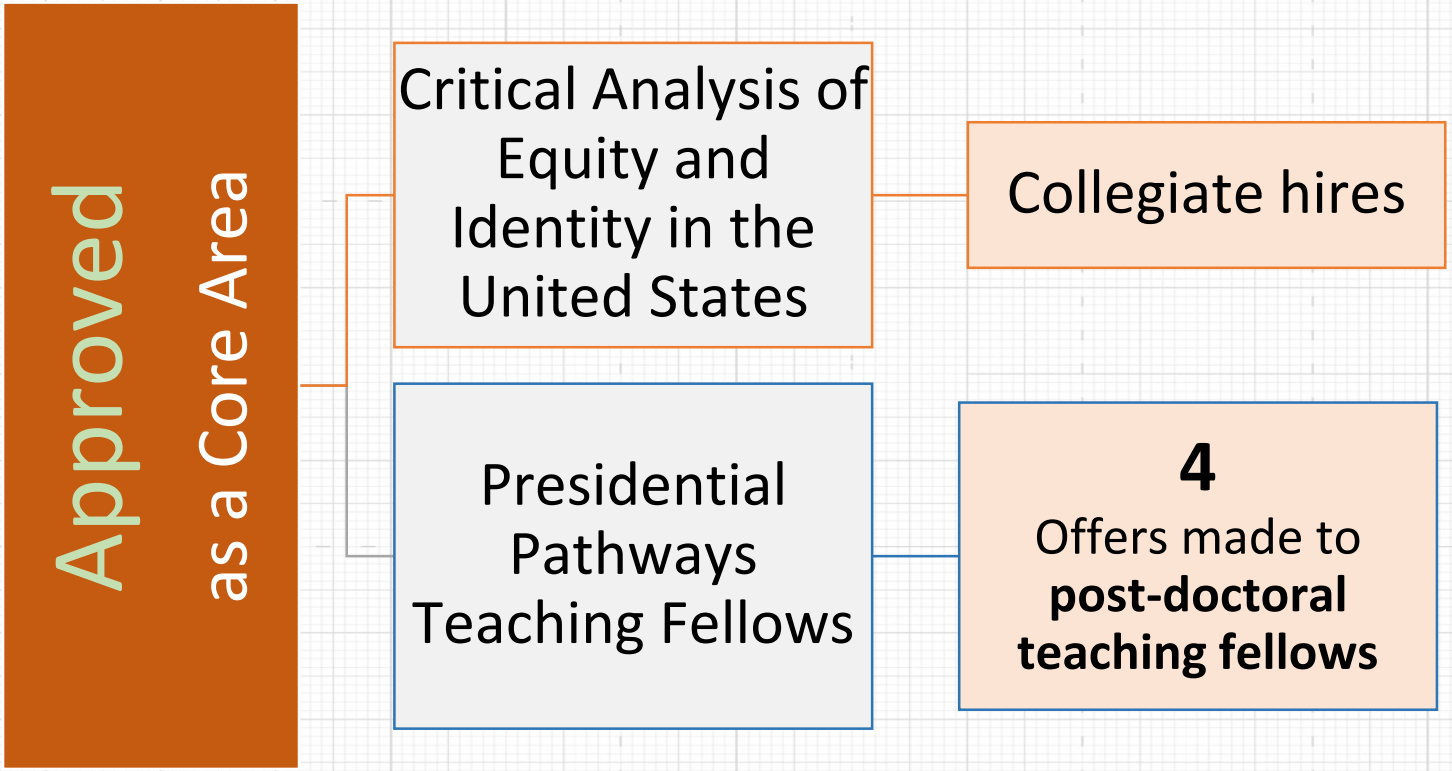
Pathways: General Education at VT

Attachment U



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Beyond General Education

Attachment U

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Equity and Social Disparity in the Human Condition

Attachment U

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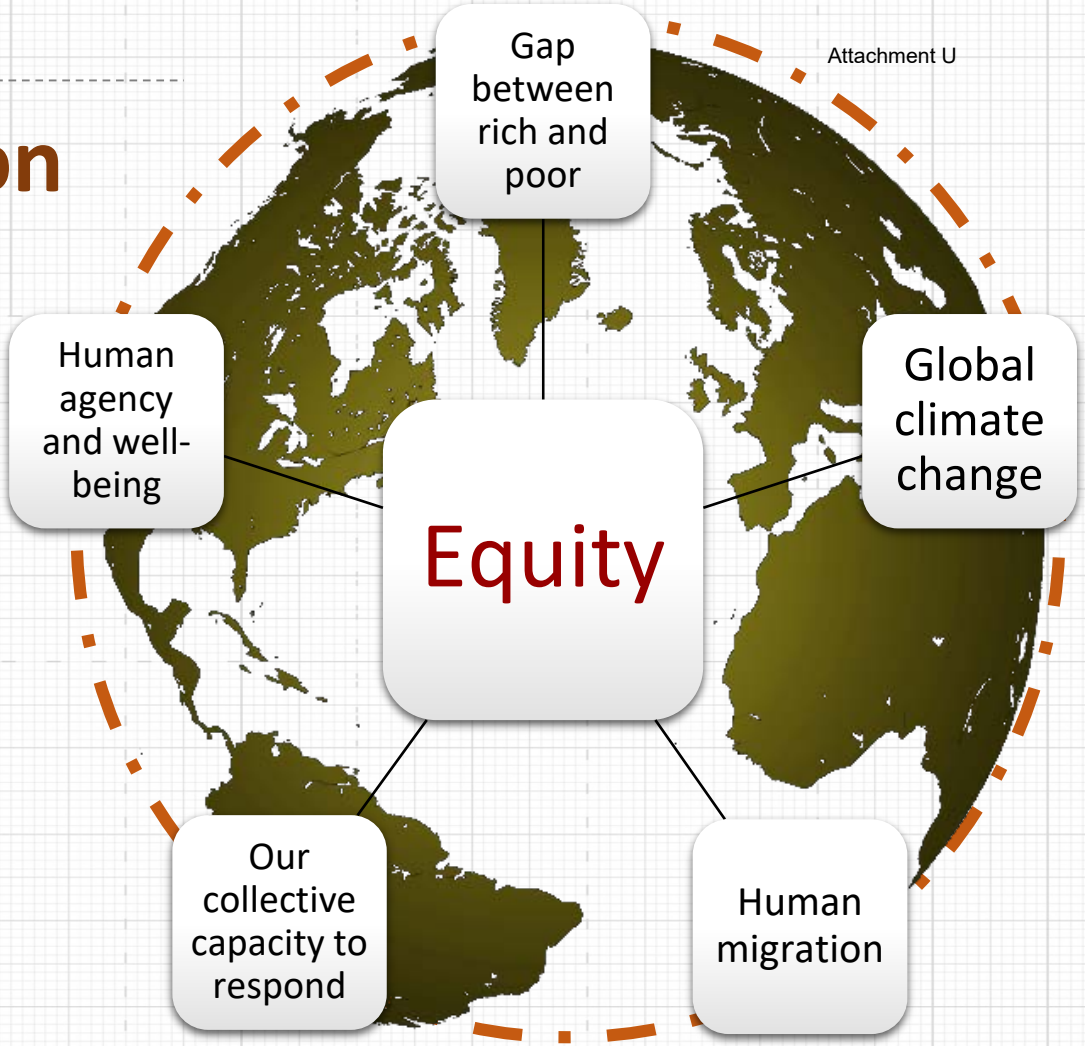
Advancing the Human Condition Symposium

November 27-28, 2018

Attachment U



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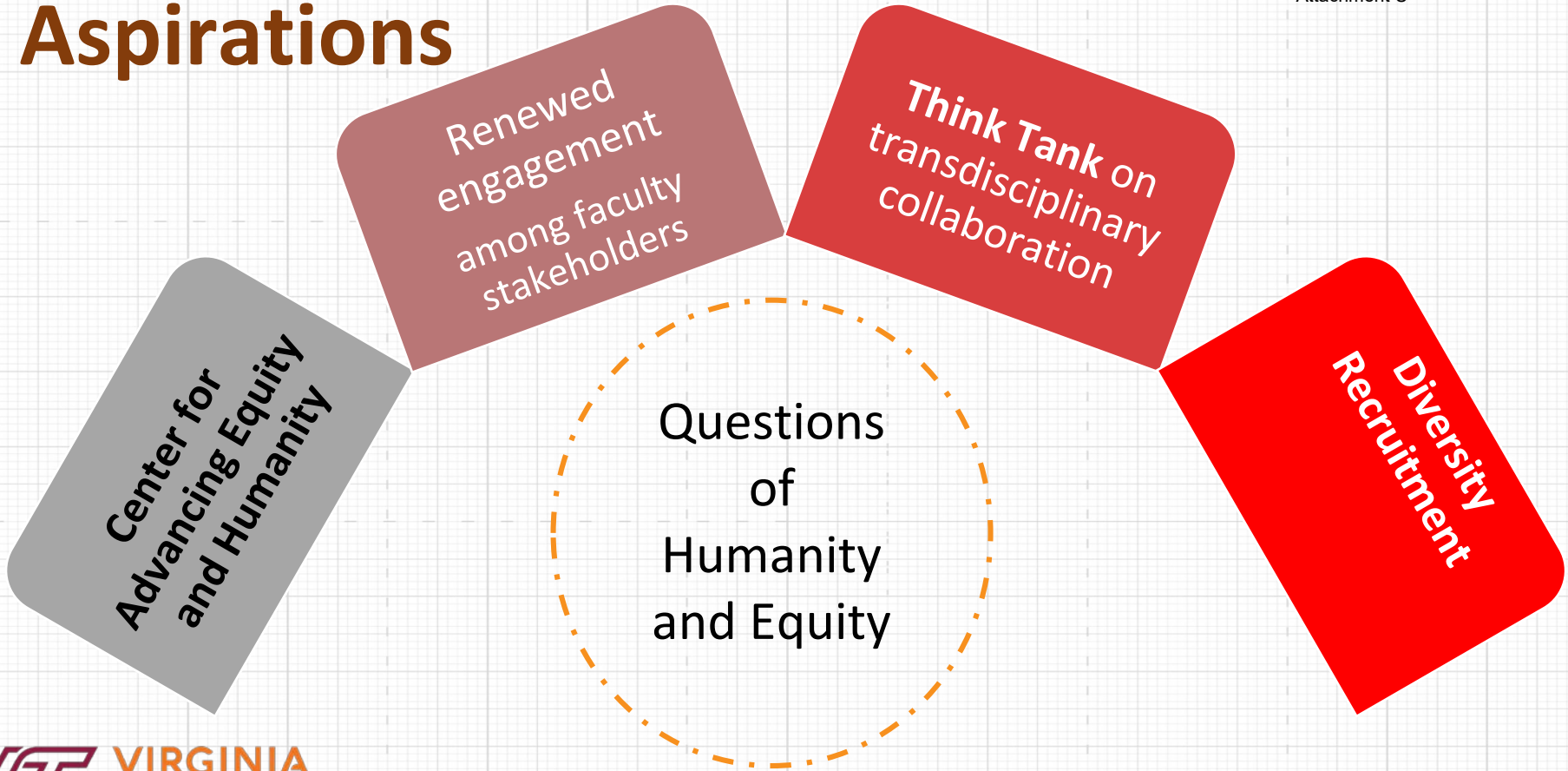
Aspirations



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The Challenges Ahead

Responding locally to the national conversation
Building a future of inclusion

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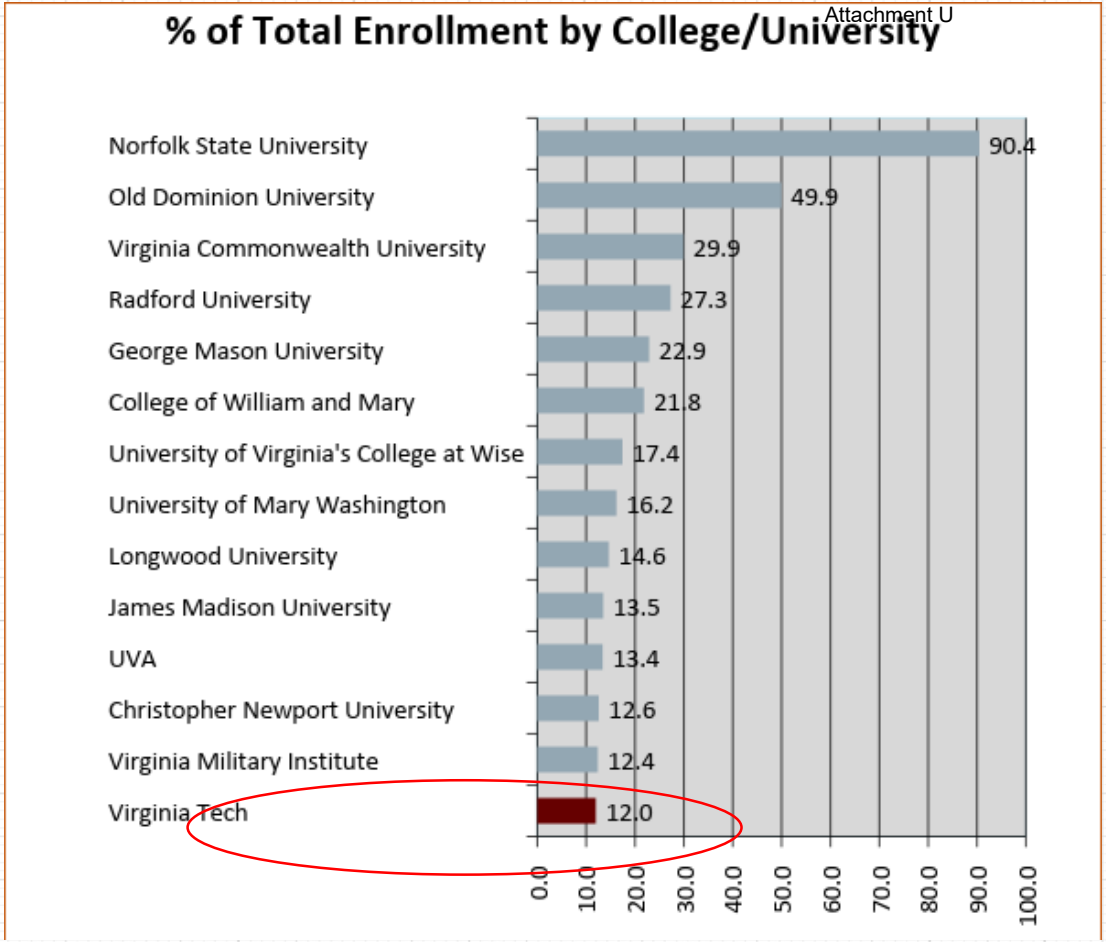
Becoming a better choice

- Since 1987: incremental increases **(0.25%)** in underrepresented enrollment.
- **What needs to happen to meet our 2022 goal?**
- How do we become a destination for underrepresented youth in Virginia?



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Being more courageous

- How do we have the **hard conversations** needed to fufill our aspirations?

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Building our InclusiveVT community

- Are we prepared to respond to **national conversations on diversity and inclusion**—especially when those conversations occur **in our community?**

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Open Conversation and Dialogue

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Virginia Tech Town Hall on Diversity Data Overview

0

TIM SANDS, PRESIDENT

MENAH PRATT-CLARKE, VICE PRESIDENT FOR STRATEGIC AFFAIRS AND VICE PROVOST FOR INCLUSION AND DIVERSITY

MAY 3, 2018

Data Overview

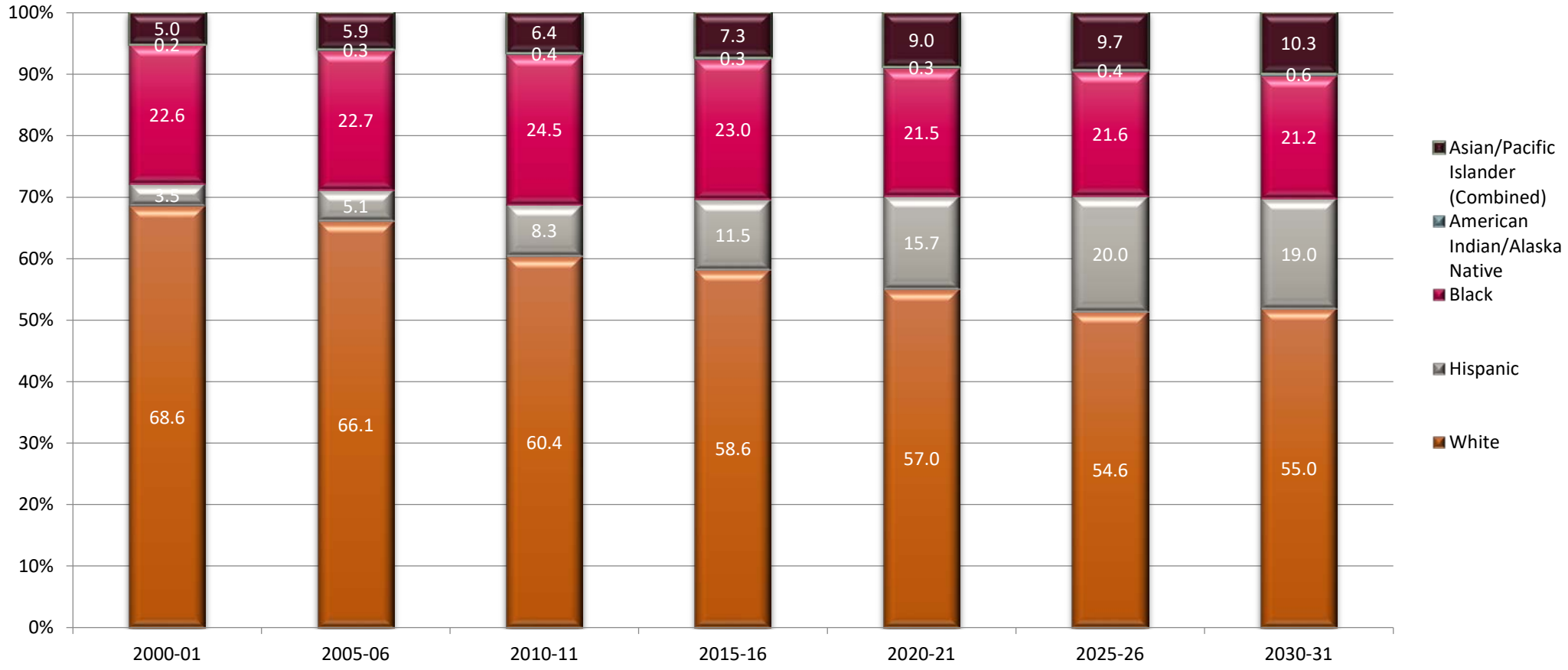
- High School Students in Virginia Diversity Data
- VT Undergraduate Student Enrollment Data
- VT Retention/Graduation Data
- VT Graduate Student Enrollment Data
- VT Faculty Diversity Data
- VT Staff Diversity Data

High School Graduates

Increasing Diversity Among Virginia's High School Graduates

- Over the next 15 years, the diversity of Virginia's high school graduates is expected to increase dramatically.
- Data projections from the Western Interstate Commission for Higher Education (WICHE) through the year 2032 suggest that Virginia's underrepresented minorities high school graduates will increase from 34% in 2017-18 to 40.5% in 2032.

Virginia High School Graduates, Race/Ethnicity Projections Through 2030



Source: Western Interstate Commission for Higher Education (WICHE)

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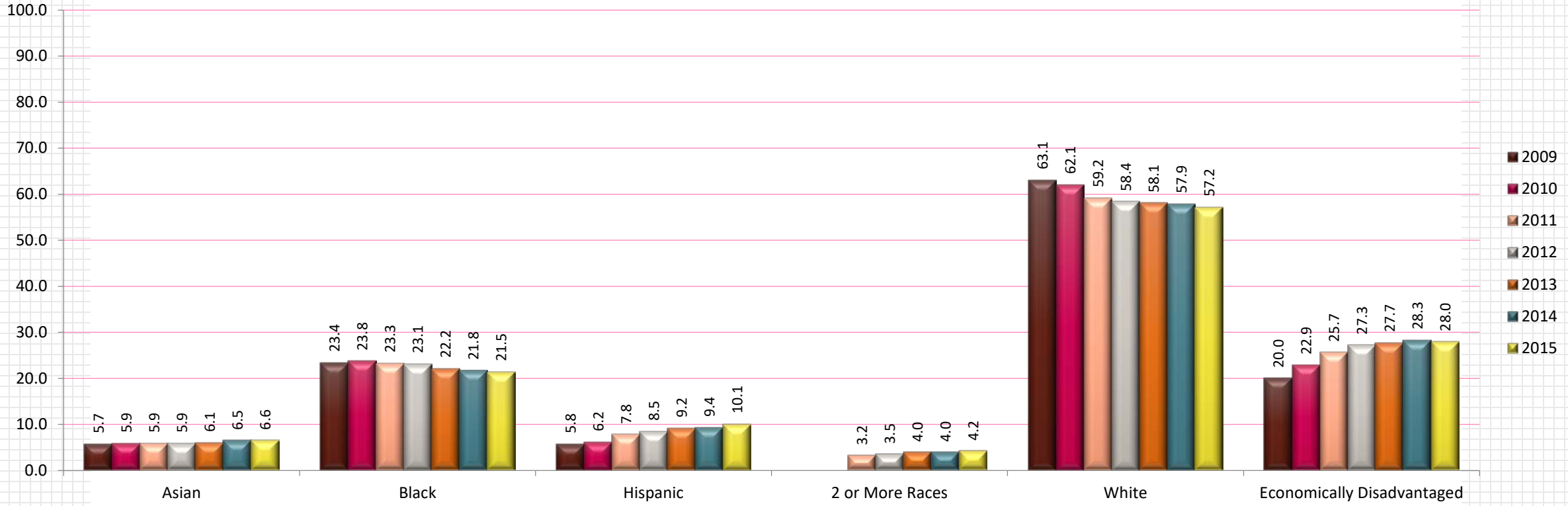
Virginia High School Graduates, Race/Ethnicity and Economic Status, % of Total, 2009-2015

The number of underrepresented and economically disadvantaged high school graduates has increased steadily since 2009.



Note: American Indian and Native Hawaiian constitute less than 0.5% of Virginia High School graduates
Source: Virginia Department of Education

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Notes: Virginia High School Graduates

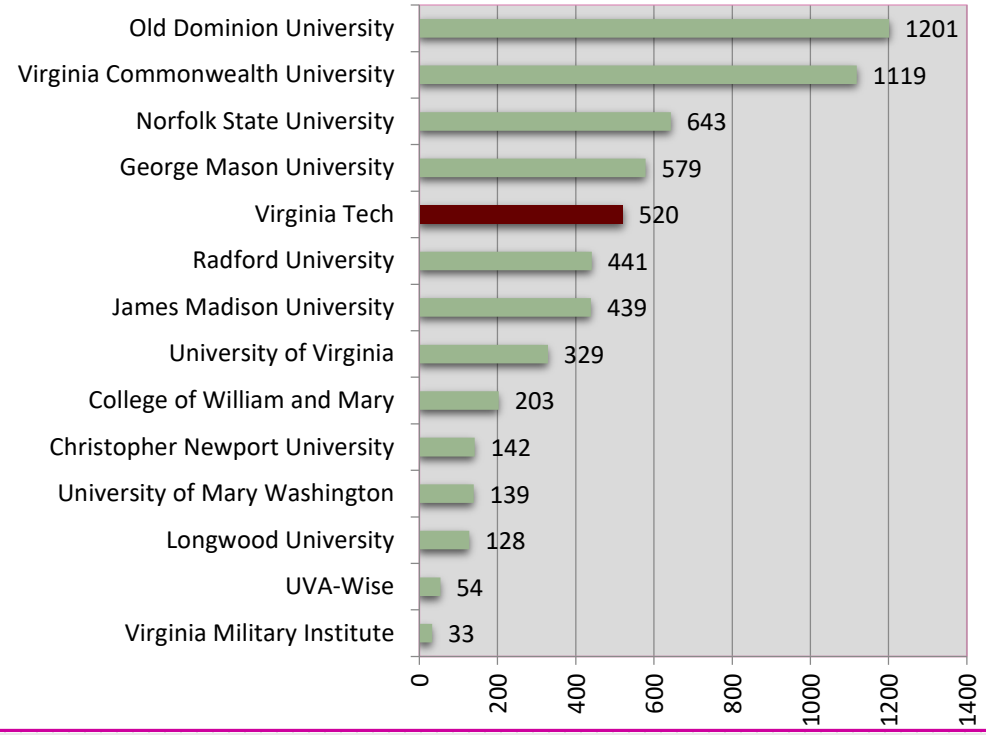
- Source: Knocking at the Door. Western Interstate Commission for Higher Education (WICHE). http://knocking.wiche.edu.
- Race Ethnicity categories include: American Indian/Alaska Native, Asian/Pacific Islander (Combined), Black, Hispanic (Alone or Any Race) and White,
- Underrepresented race/ethnicity includes American Indian/Alaska Native, Black, and Hispanic.
- WICHE data combines Native Hawaiian/Pacific Islander with Asian; however, in 2002 the US Department of Education separated these two categories. Virginia Tech includes Native Hawaiian/Pacific Islander as underrepresented.

- Source: Virginia Department of Education. (2015). State Fiscal Stabilization Fund Indicator (C)(11) Report, Four Year Graduation Rate, all divisions and schools reporting. https://p1pe.doe.virginia.gov/postsec_public/postsec.do?dowhat=LOAD_REPORT_C11.
- Not yet updated for 2016
- For Virginia Department of Education, enrollment in a four-year public institution is measured as the number of students who enroll 16 months of earning a federally recognized high school diploma.
- VDOE defines a student as economically disadvantaged if the student:
  - is eligible for Free/Reduced Meals,
  - receives TANF, or
  - is eligible for Medicaid:
    http://www.doe.virginia.gov/info_management/data_collection/student_record_collection/data_definitions.shtml#disadvantaged
- Race Ethnicity categories include: American Indian, Asian, Black, Hispanic, Native Hawaiian, White, 2 or More
- Underrepresented race/ethnicity includes American Indian, Black, Hispanic, and Native Hawaiian.
- Two or more races includes all race/ethnicity categories except Hispanic. Not all of these students are underrepresented. (Two or more races was not collected by VDOE prior to 2011).
- Hispanic includes students who are Hispanic/Latino of any race.

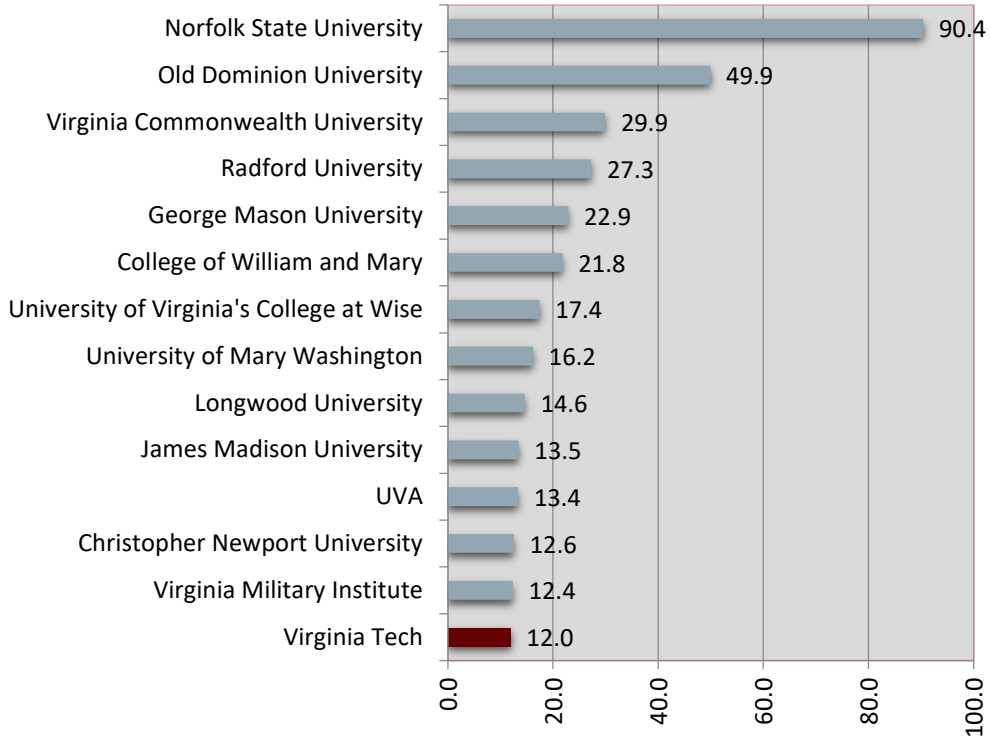
**Underrepresented In-State First-Time Freshmen who Enrolled in Four-Year Public Institutions, 2016-17

In 2016-17, 12% of Virginia Tech's freshman enrollees were underrepresented Virginia high school graduates.

Number by College/University



% of Total Enrollment by College/University



Source: State Council of Higher Education for Virginia (SCHEV)

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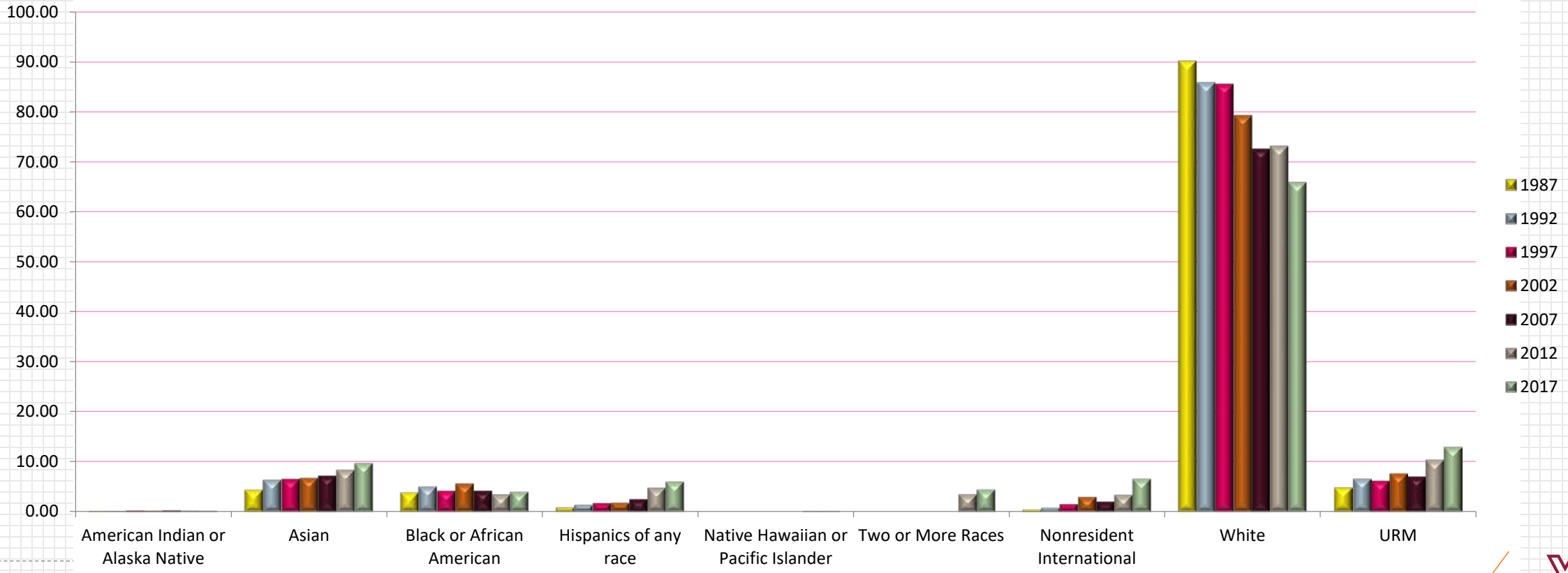
Notes: State Council of Higher Education for Virginia (SCHEV) Comparison Data

- Source: SCHEV report E12R: Fall Headcount by Domicile/Race-Ethnicity of New Undergraduates. http://research.schev.edu/enrollment/E12R_Report.asp
- Underrepresented includes Black/African American, American Indian, and Hispanic.
  - SCHEV data combines Native Hawaiian/Pacific Islander with Asian; however, in 2002 the US Department of Education separated these two categories. Virginia Tech includes Native Hawaiian/Pacific Islander as underrepresented.
  - Hispanic includes people of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race.
  - Multi-race students are excluded from this analysis as the breakout by race/ethnicity is not included in SCHEV data.
- Virginia State reported majority of new students as "Unknown" race/ethnicity in 2016-17. For the purposes of this analysis, Virginia State is excluded from the chart.
- For SCHEV, enrollment in a four-year public institution is measured as the number of students who enroll as first-time freshmen in a given year.

Undergraduate Students

Undergraduate Students, % Enrollment by Race/Ethnicity, 1987-2017

Since 1987, Virginia Tech's enrollment of underrepresented students has increased from 4.9% to 12.5%, at a rate of 0.25% per year.



Source: Institutional Research and Effectiveness, Fall census

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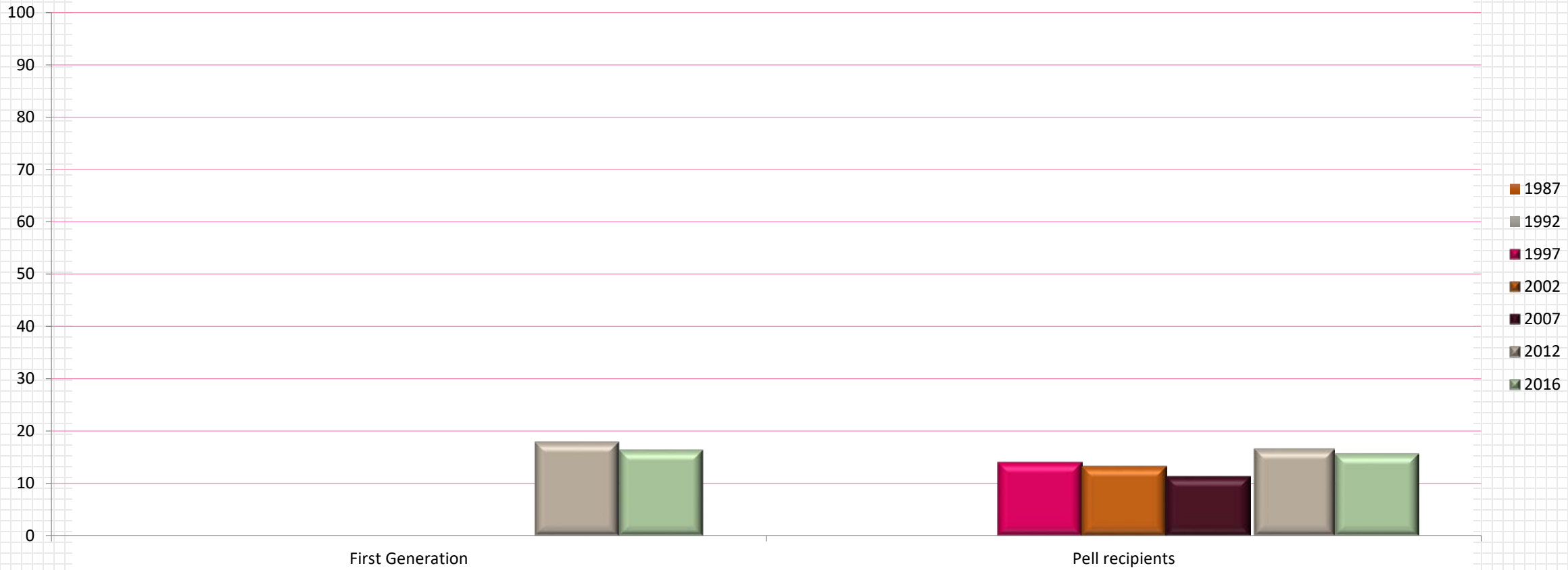
**Undergraduate Students, % Enrollment for Pell Recipients and First Generation Students, 1997-2017



Source: Institutional Research and Effectiveness, Fall census. First generation student data not collected prior to 2006

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Project 2022 Goals: 40% by 2022

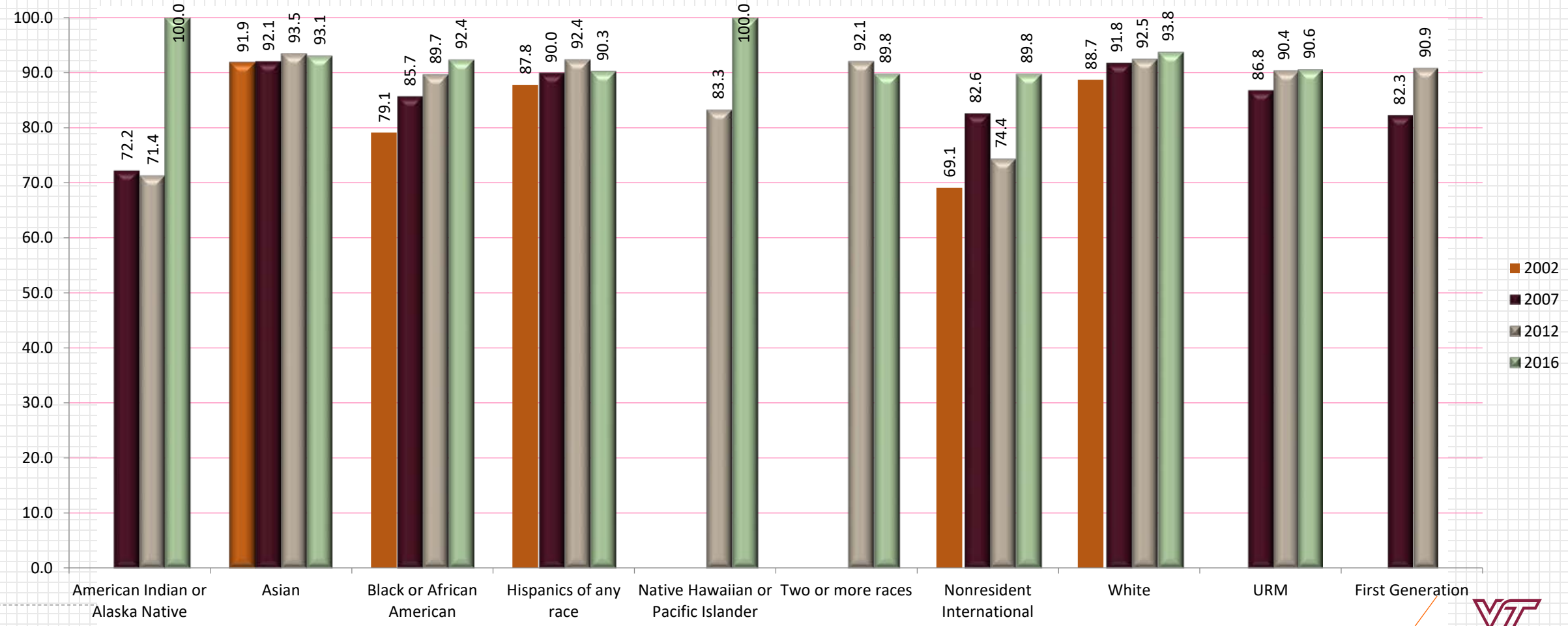
- By 2022, Virginia Tech projects a goal of:
  - 25% underrepresented minority students
  - 40% total (underserved and underrepresented students)

Notes: Underrepresented and Underserved Undergraduate Students

- Source: Virginia Tech Institutional Research and Effectiveness data request, September 30 of each year.
- Underrepresented Minorities (URM) include students who self-identify in whole or in part as:
  - American Indian or Alaska Native,
  - Black or African American,
  - Hispanics of any race, or
  - Native Hawaiian or Other Pacific Islander.
  - If a student self-identifies as two or more races, they are counted as an underrepresented minority, unless the two races chosen are White + Asian.
- The options of Native Hawaiian or Other Pacific Islander and Two or More Races were introduced into the student data in 2009.
- For the purposes of this presentation, nonresident international is used to indicate the category nonresident alien, based upon recommendations from the InclusiveVT evaluation report (Depauw, 2015). The term nonresident alien is defined as "a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely"(http://ir.vt.edu/about/glossary.html#nra).
- First generation student data collected starting in 2006
- National Center for Educational Statistics race/ethnicity definitions are used, unless otherwise indicated (https://nces.ed.gov/ipeds/Section/definitions).
- Pell-eligible data – data prior to 2010 available through Enrollment Management
  - Income data by quintile for 2001-2013 is available in the report, **Student Costs in Higher Education: Focus on Virginia Tech**, Spring – Summer 2015. See also Figures 12-15 reflecting retention by income quintile

Undergraduate Retention

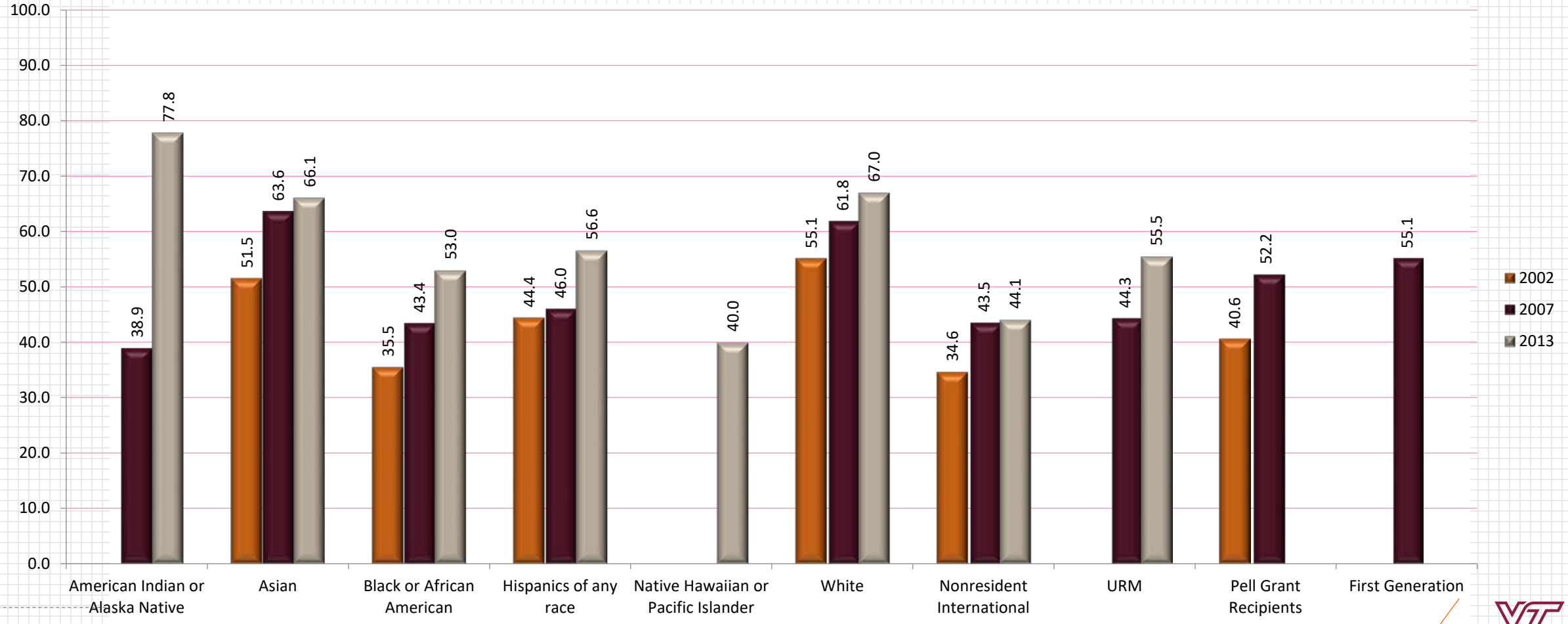
**Virginia Tech Undergraduate Students, % Continued to 2nd Year, 2002-16



Source: Institutional Research and Effectiveness, Fall census

VIRGINIA TECH

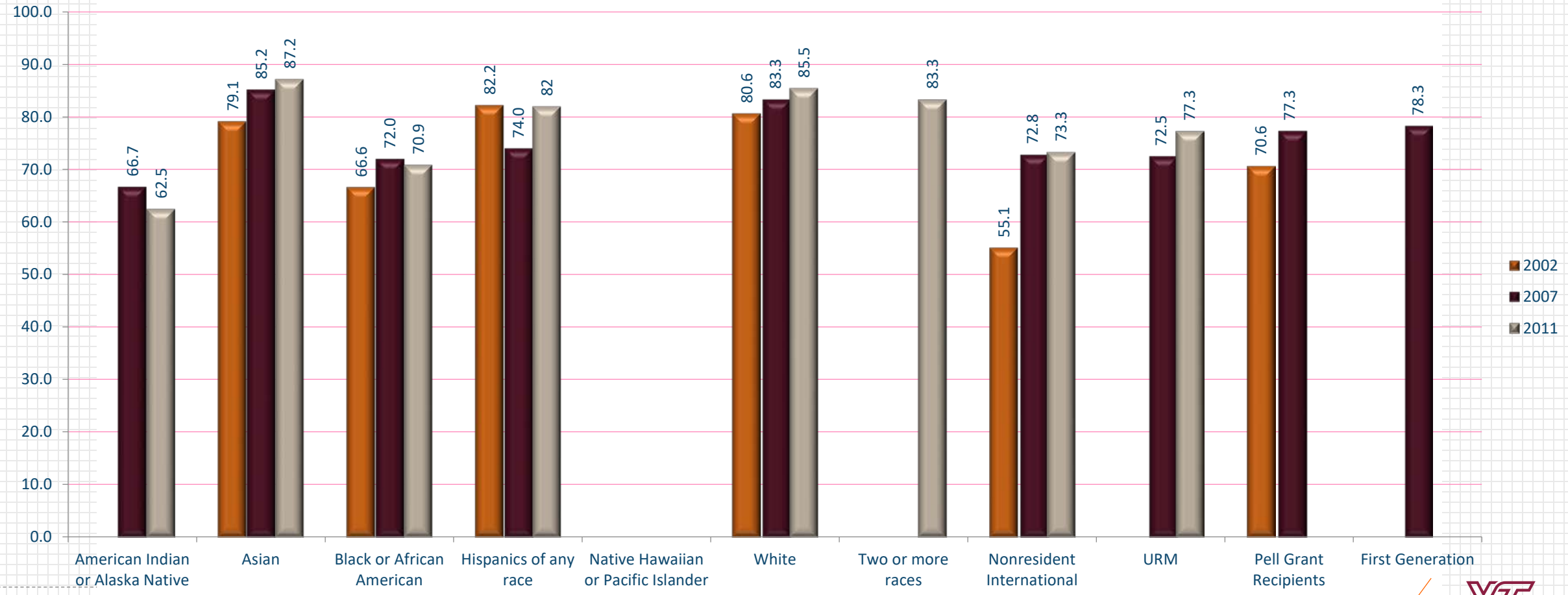
**Virginia Tech Undergraduate Students, 4 Year Graduation Rate, 2002-13



Source: Institutional Research and Effectiveness, Fall census

VIRGINIA TECH

**Virginia Tech Undergraduate Students, 6 Year Graduation Rate, 2002-11

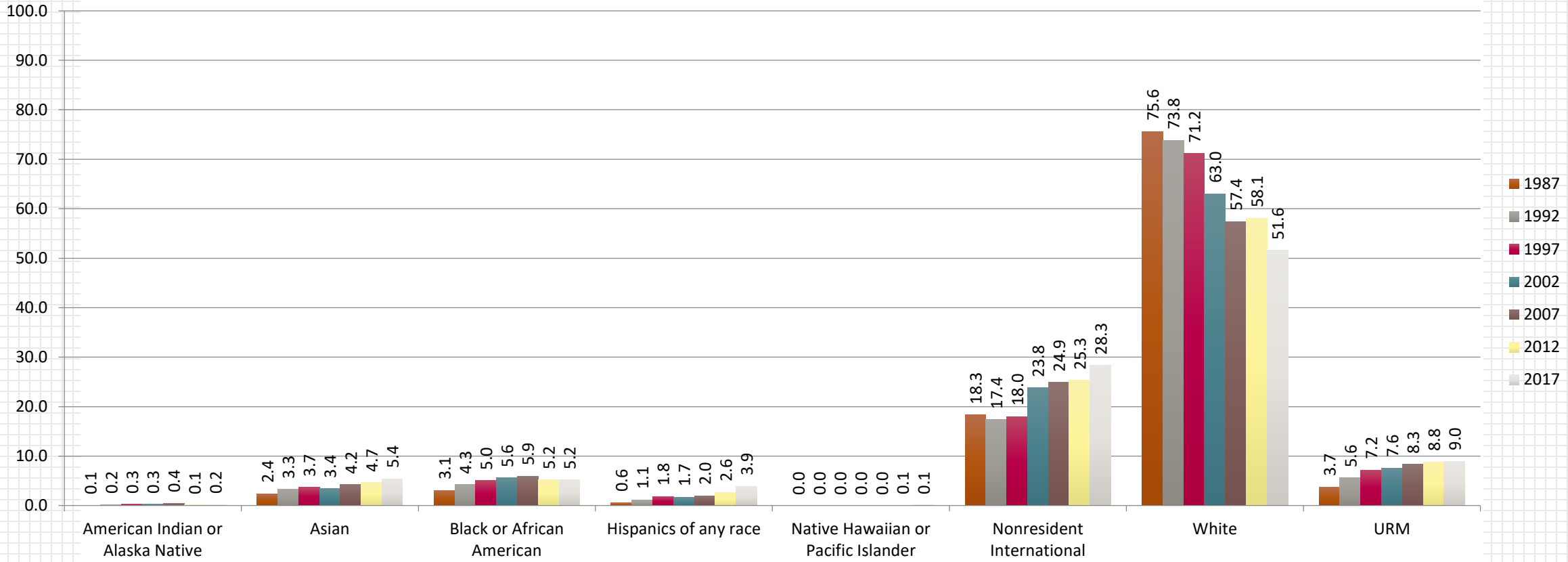


Source: Institutional Research and Effectiveness, Fall census

VIRGINIA TECH

Graduate Students

Graduate/Professional Student Enrollment by Race/Ethnicity, 1987-2017



Source: Institutional Research and Effectiveness, Fall census

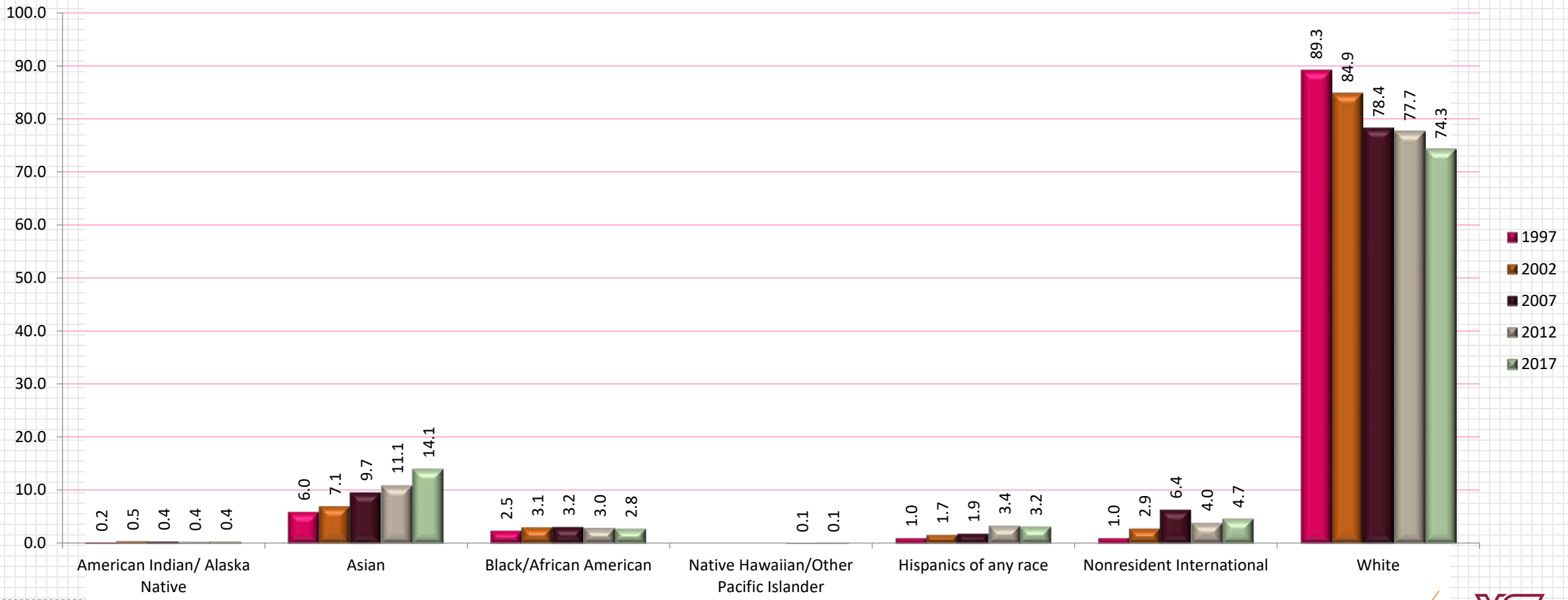
VIRGINIA TECH

NOTES: Graduate Student Data

- Source: Virginia Tech Institutional Research and Effectiveness Diversity Strategic Plan data request, September 30 of each year.
- Underrepresented Minorities include students who self-identify in whole or in part as:
  - American Indian or Alaska Native,
  - Black or African American,
  - Hispanics of any race, or
  - Native Hawaiian or Other Pacific Islander.
  - If a student self-identifies as two or more races, they are counted as an underrepresented minority, unless the two races chosen are White + Asian.
- The options of Native Hawaiian or Other Pacific Islander and Two or More Races were introduced into the data in 2009.
- For the purposes of this presentation, nonresident international is used to indicate the category nonresident alien, based upon recommendations from the InclusiveVT evaluation report (Depauw, 2015). The term nonresident alien is defined as “a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely”(http://ir.vt.edu/about/glossary.html#nra).

Tenured/Tenure Track Faculty

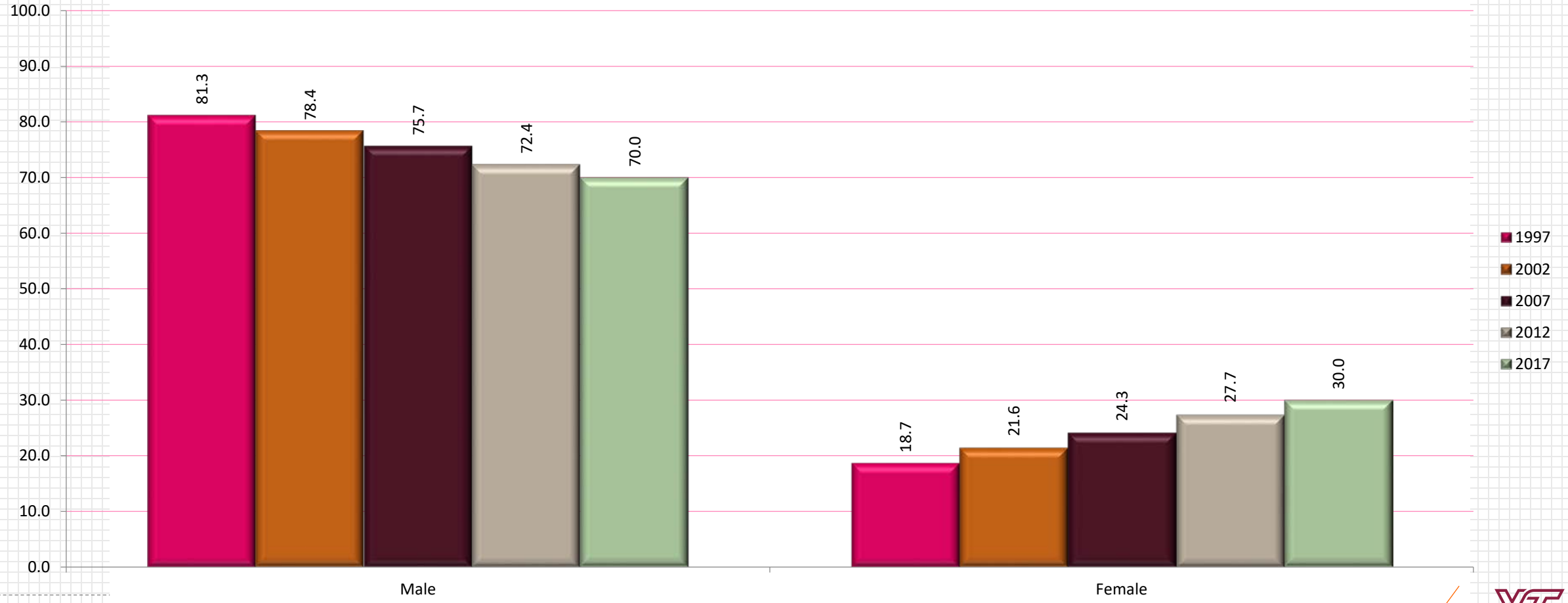
Tenured/Tenure Track Faculty, % by Race/Ethnicity, 1997-2017



Source: Institutional Research and Effectiveness, Fall census

VIRGINIA TECH

Tenured/Tenure Track Faculty, % by Gender, 1997-2017

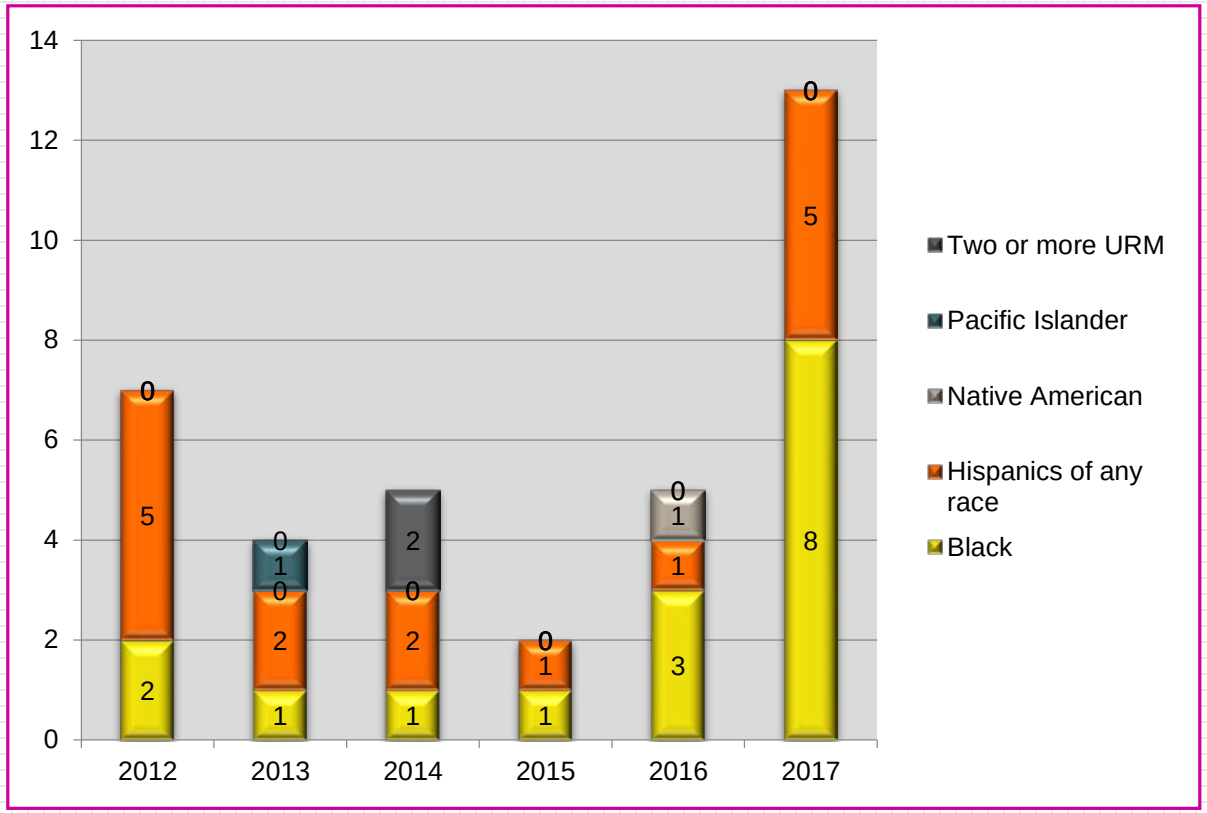


Source: Institutional Research and Effectiveness, Fall census

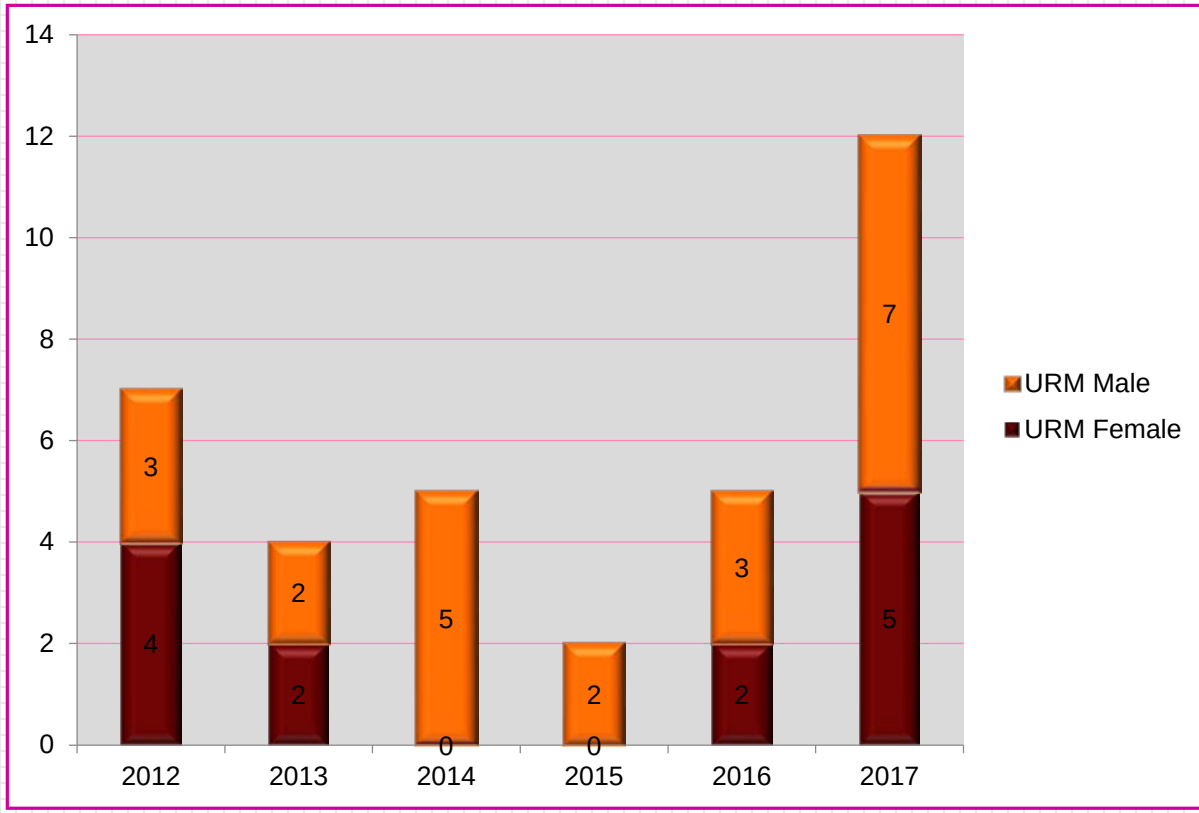
VIRGINIA TECH

New Tenured/Tenure Track Faculty Hires, 2012-17, 2018 Projected

By Race/Ethnicity



By Gender



Note: 30 new underrepresented hires expected for 2017-18!

Data source: Institutional Research and Effectiveness, Fall census

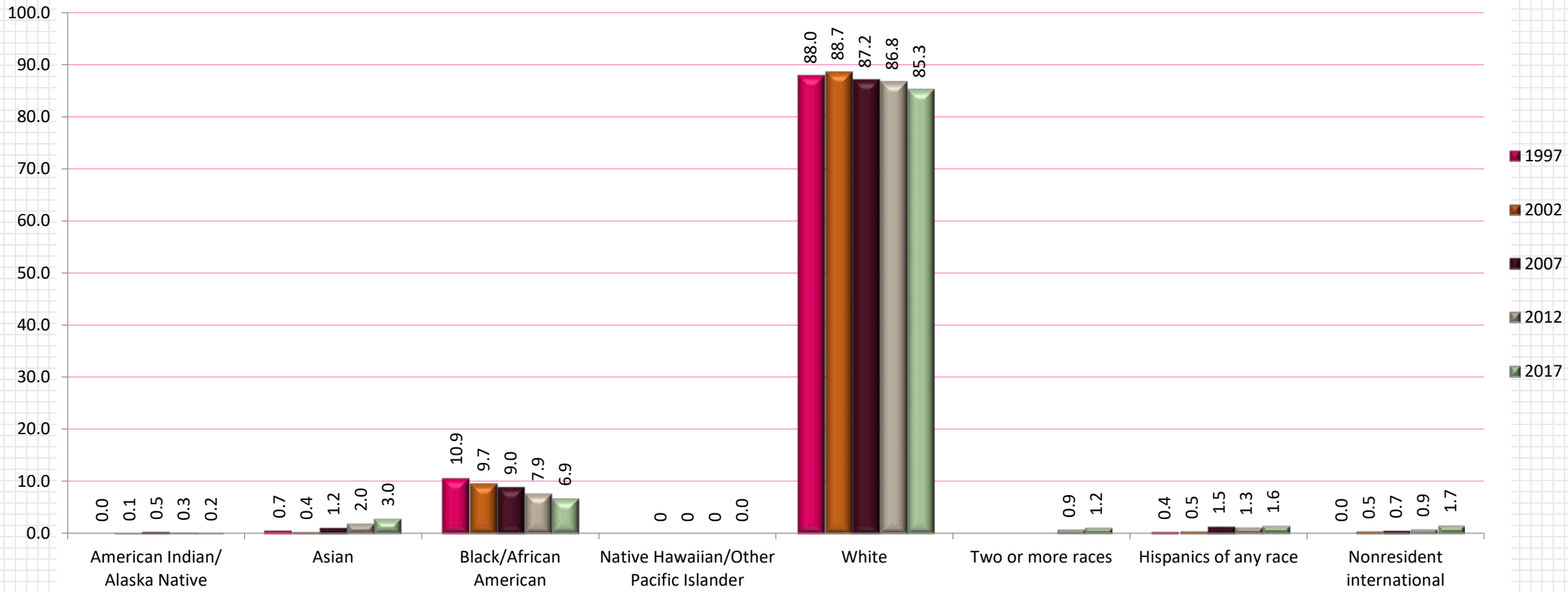
VIRGINIA TECH

NOTES: Tenured/Tenure Track Faculty Data

- Source: Virginia Tech Institutional Research and Effectiveness Diversity Strategic Plan data request, employee census as of September 30 of each year.
- Additional faculty data available from 1988-1997 through the National Center for Educational Statistics, https://nces.ed.gov.
- Nonresident International tenured/tenure track faculty comprise primarily Assistant Professors. Many Associate and Full have achieved resident international status by time of promotion.
  - For the purposes of this presentation, nonresident international is used to indicate the category nonresident alien, based upon recommendations from the InclusiveVT evaluation report (Depauw, 2015). The term nonresident alien is defined as “a person who is not a citizen or national of the United States and who is in this country on a visa or temporary basis and does not have the right to remain indefinitely”(http://ir.vt.edu/about/glossary.html#nra).
- Faculty hires for the coming academic year typically have a hire date of August 10.

Academic Professional Faculty/Staff

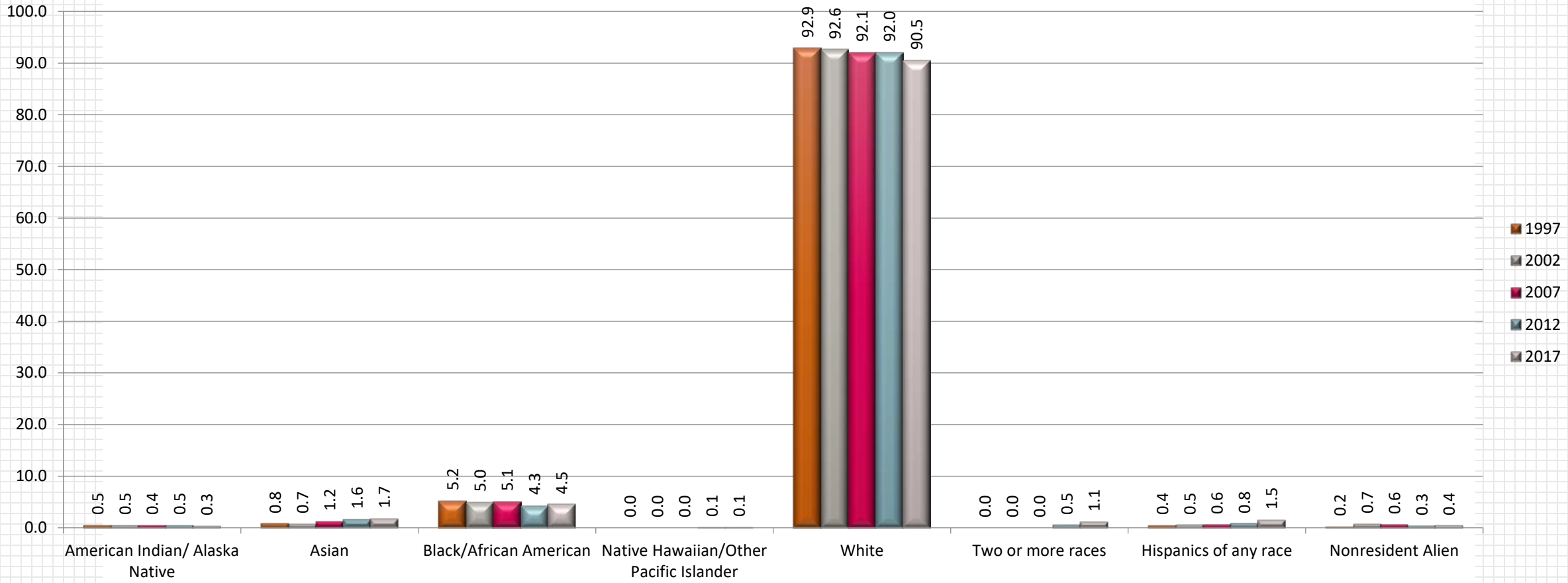
Administrative/Professional Faculty, % by Race/Ethnicity, 1997-2017



Source: Institutional Research and Effectiveness, Fall census

VIRGINIA TECH

Staff, % by Race/Ethnicity, 1997-2017



Source: Institutional Research and Effectiveness, Fall census

VIRGINIA TECH

NOTES: AP and Staff Data

- Source: Virginia Tech Institutional Research and Effectiveness Diversity Strategic Plan data request, September 30 of each year.
- Source: Virginia Tech Institutional Research and Effectiveness, https://irweb.ir.vt.edu/webtest/FacultyStaffGenderEthnicity.aspx .
- Additional faculty data available from 1988-1997 through the National Center for Educational Statistics, https://nces.ed.gov.

Special thanks to:

- Virginia Tech Institutional Research and Effectiveness
  - Roxanne Gile
  - Dennis Catley
  - Kacy Lawrence
  - Janice McBee
- Office for Inclusion and Diversity
  - Marcy Schnitzer
  - Linwood Moore

The Promotion and Tenure Process

JACK W. FINNEY

VICE PROVOST FOR FACULTY AFFAIRS

BOV INFORMATION SESSION, JUNE 3, 2018

VIRGINIA TECH™

Faculty Ranks

Assistant Professor

- Responsibilities in teaching; research, scholarship, or creative achievements; and outreach and professional service; six year probationary period

Associate Professor

- Accomplishments in an appropriate combination of outstanding teaching; research, scholarship, or creative achievements; and outreach and professional service

Professor

- National or international recognition and excellence in research, scholarship, or creative achievement

Tenured | Collegiate | Clinical | Practice | Research

Tenure and Continued Appointment

Tenure

- Tenure is awarded when the community of scholars has judged the candidate to have met the teaching, research, and/or service expectations of the discipline, college, and university.

Continued Appointment

- Continued appointment is a parallel tenure status for library and extension faculty who demonstrate excellent service to Virginia Tech and continued professional growth and engagement.

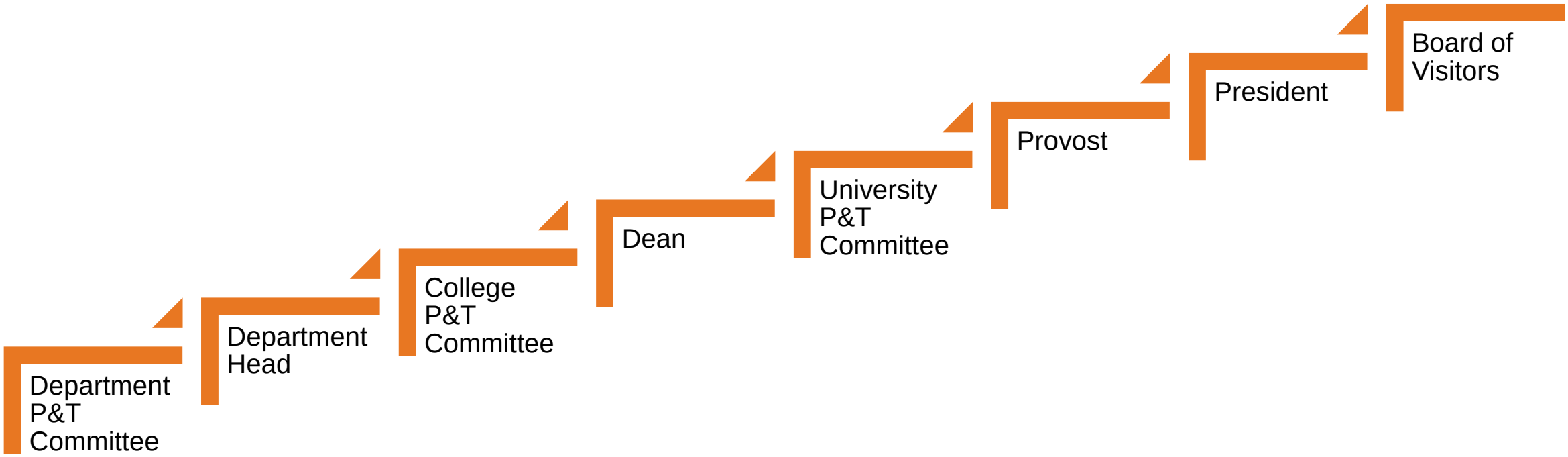
Tenure and continued appointment ensure academic freedom in research and teaching.

Promotion & Tenure Dossier

I. Executive Summary
II. Recommendation Letters (internal and external)
III. Candidate's Statement
IV. Teaching and Advising Effectiveness
V. Research and Creative Activities
VI. International & Professional Service and Other Outreach & Extension Activities
VII. University Service
VIII. Work Under Review or In Progress
IX. Other Pertinent Activities

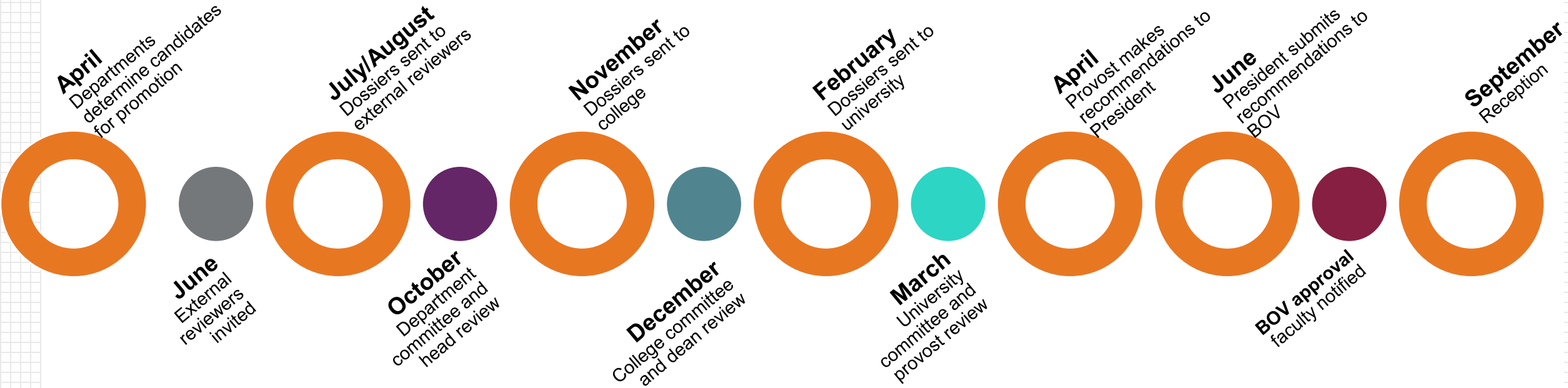
Evaluation Process for Promotion & Tenure

Attachment U



VIRGINIA TECH

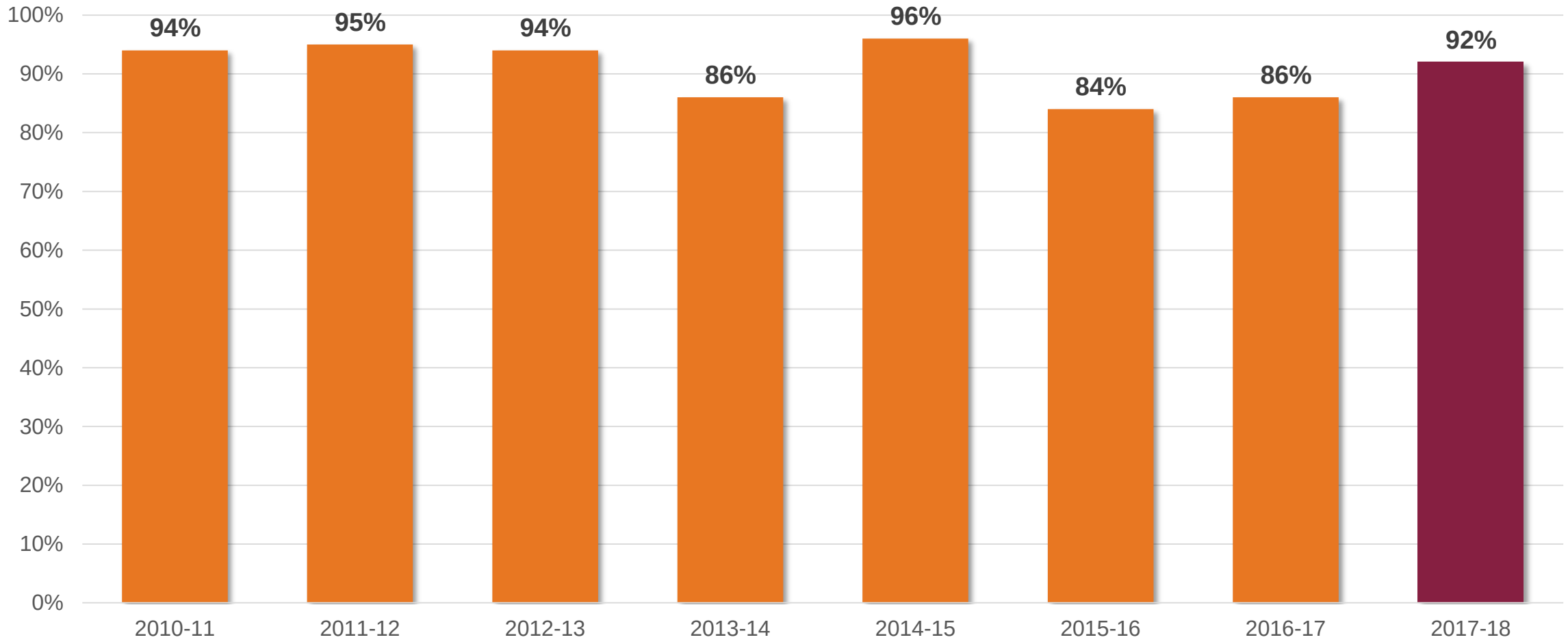
Promotion & Tenure Schedule



Promotion & Tenure Policies & Practices

- Six-year probationary period
- 2nd and 4th year reviews of progress
- Extend the tenure clock policy
- Non-mandatory promotion to associate with tenure
- Mentoring for assistant professors
- Mentoring for associate professors
- Written expectations and standards
- Workshops on the promotion process
  - P&T committee members and heads
  - Promotion to professor
  - College committees and faculty

Promotion & Tenure Success, 2010-2018



Questions?

RESOLUTION TO APPROVE NEW DEGREE, BACHELOR OF ARTS IN SCIENCE, TECHNOLOGY, AND SOCIETY

WHEREAS, emerging science and technology present new and unanticipated social, political, and ethical consequences; and

WHEREAS, science, technology, and society (STS) is a growing interdisciplinary field that brings together conceptual and methodological frameworks from the social sciences and humanities to develop ways of understanding and intervening in the relationship of science and technology to society; and

WHEREAS, public and private organizations increasingly require management, communication, marketing, and research personnel who have a thorough knowledge of the social and ethical dimensions of emerging science and technology; and

WHEREAS, there is currently no undergraduate degree in science, technology, and society offered at institutions of higher education in Virginia; and

WHEREAS, the bachelor of arts in STS embodies the elements of the "VT-shaped Individual" with depth in the specialized concepts and frameworks of STS, transdisciplinary skills, and problem-driven, experiential learning; and

WHEREAS, the Department of Science, Technology, and Society at Virginia Tech is a leading department in graduate instruction and research in the field and already offers a range of undergraduate courses, providing about 2,000 credit hours of undergraduate instruction per year; now

THEREFORE, BE IT RESOLVED, that the bachelor of arts in science, technology, and society be approved effective spring 2019 and the proposal forwarded to the State Council of Higher Education for Virginia (SCHEV) for approval.

RECOMMENDATION:

That the above resolution recommending the establishment of the bachelor of arts in science, technology, and society be approved.

June 4, 2018

Virginia Tech Degree Proposal
Bachelor of Arts/Bachelor of Science in Science, Technology, and Society
(CIP: 30.1501)

Type of degree action: New

Program Description

The Department of Science, Technology, and Society is proposing a new Undergraduate Degree Program in Science, Technology, and Society. The program will offer both a Bachelor of Arts and a Bachelor of Science. The program anticipates admitting its first students in spring of 2019, and will begin awarding degrees in 2021.

The field of Science, Technology, and Society studies the relationship of science and technology to their social, political, and cultural contexts. It examines the ways that the development of technologies and the course of scientific research are shaped by their social settings, and in turn, the ways that scientific and technological developments impact society.

As an interdisciplinary field, Science, Technology, and Society draws from the social sciences and humanities, particularly from Anthropology, Sociology, History, and Philosophy. The field has also developed its own concepts and frameworks, which have proven particularly revealing in the study of the social dimensions of technical fields. Central concerns of the field include the politics of expertise, public deliberation on science and technology policy, the social consequences of molecular biology and associated technologies, innovation as a social process, information technologies and social change.

In addition to advancing knowledge of this subject area, the field of STS has a strong tradition of practical involvement in the interface between society and the technical fields of science and technology. STS scholars and practitioners work with scientists and engineers to incorporate a greater awareness of the social and ethical consequences of their work into their professional work itself. And STS-trained professionals work with citizens' groups and other stakeholders to translate and interpret scientific and technological developments in terms of their risks, benefits, and other social consequences. They can often facilitate informed public involvement in deliberation over policy responses. Faculty in STS at Virginia Tech are already working on projects involving reshaping the training of engineers, developing strategies for disaster response, and involving citizens in research on environmental health risks.

The program will build on existing strengths of faculty in the Department of Science, Technology, and Society and the graduate program in Science and Technology Studies. Active scholarship of faculty, with strengths in science and technology policy, energy and environmental issues, engineering studies, biomedicine and society, will expose undergraduates to the state of the art in STS research and public outreach.

The Undergraduate Degree Program in STS has six emphases:

1. The study of STS as a set of perspectives, concepts, and methods that apply across a broad range of issues for research and active intervention involving science and technology.
2. A focus on contemporary problems involving science and technology, developing approaches to those problems that take into account their social dimensions and social consequences.
3. Real-world engagement through experiential and collaborative learning.

4. Acquisition of a set of transdisciplinary skills, including technological literacy, professional presentations, research design, critical thinking, and managing collaborative projects.
5. **For the Bachelor of Arts degree**, advanced knowledge in humanistic and social science perspectives on science and technology.
6. **For the Bachelor of Science degree,** technical literacy at an advanced undergraduate level, in a specialized area of science and technology.

In the degree's core, students will learn general conceptual tools and perspectives of STS. But beyond the introductory course (STS 1504), these are taught in conjunction with specific contemporary problem areas: environment, biomedicine and the life sciences, global science and technology policy, and innovation.

The core includes an innovative course on the practice of collaborative research (STS 3504 Collaborative Research in Science, Technology, and Society). The course combines research methods with hands-on experience in collaborative work on a social problem involving science and/or technology. During alternate years, the collaborative methods course will be coupled with the STS Department's Choices and Challenges Forum. This is a public forum on an area of science and technology that is of pressing public concern. Students in the STS Collaborative Methods course will participate in developing information materials for the forum, designing background sessions, and will interact with invited panelists in a closed workshop setting.

Furthermore, all students in the program will specialize in a focus area, where they will take 9 credit hours to acquire technical literacy and deeper knowledge of one area. The focus areas will initially consist of Energy and Environment, Medicine and Life Sciences, and Engineering and Innovation, with a fourth option consisting of a custom focus area that students design in consultation with their advisor.

The capstone, STS 4304, will provide an opportunity to pursue supervised individual research related to the student's focus area, while gaining experience in presentation and critique in a seminar setting. Students in the STS program will compile a research portfolio based on their projects in the Collaborative Methods course and the STS Capstone.

Students will complete the program with either a Bachelor of Arts or a Bachelor of Science degree. The BA is appropriate for students seeking a broad liberal arts degree, requiring additional upper-level courses in perspectives on science and technology from the humanities, social science and arts. The Bachelor of Science allows students to combine the STS requirements with a more advanced program of study in a scientific or technological area that is linked to their STS focus area.

Curriculum Summary

I. Pathways to General Education (45 credits)

Distributive Pathway:

- Discourse (9 credits)
- Quantitative and Computational Thinking (9 credits)
- Reasoning in the Natural Sciences (6 credits)
- Critique and Practice in Design and the Arts (6 credits)
- Reasoning in the Social Sciences (6 credits)

Critical Thinking in the Humanities (6 credits)
Critical Analysis of Identity and Equity in the United States (3 credits)

Pathways requirements may also be fulfilled through a Pathways Minor or Alternative Pathway.

II. STS Degree Core Requirement (21 credit hours)

STS Core Sequence

STS 1504: Introduction to Science, Technology, and Society (3 cr)
STS 3504: The Practice of Collaborative Research in STS (3 cr)
STS 4304: Contemporary Issues in Science, Technology, and Society (3 cr)

Core area requirements

STS 2154: Humanities, Technology and the Life Sciences (3 cr)
STS 2254: Innovation in Context (3 cr)
STS 2454: Science, Technology, and the Environment (3 cr)
STS 2444: Global Science and Technology Policy (3 cr)

III. Focus Area Restricted Electives (9 credit hours)
Nine credit hours in one of the following focus areas

Energy and Environment (three of the following):

ENGL 3534: Literature and Ecology (3 cr)
GEOG/NR 1115-1116: Seeking Sustainability[1] (3 cr)
GEOG 3104: Environmental Problems, Population, and Development (3 cr)
HIST 3144: American Environmental History (3 cr)
PHIL 2304: Global Ethics (3 cr)
STS 3334: Energy and Society (3 cr)
UAP/PSCI 3344: Global Environmental Issues: Interdisciplinary Perspectives (3 cr)
UAP 3354: Introduction to Environmental Policy and Planning (3 cr)

Engineering and Innovation (three of the following):

ENGL 3844: Writing and Digital Media (3 cr)
HIST/SOC/STS 2604: Introduction to Data in Social Context (3 cr)
HIST/STS 2715, 2716: History of Technology (3 cr)
HIST 3114: United States Business History (3 cr)
MGT 3064: Cornerstones of Entrepreneurship and Innovation (3 cr)
STS/HIST 2054: Engineering Cultures (3 cr)

Life Sciences and Biomedicine (three of the following):

ENGL 3154: Literature, Medicine, and Culture (3 cr)
ENGL/STS 4314: Narrative Medicine (3 cr)
HIST 3624: Health and Illness in African History (3 cr)
HIST 3714: War and Medicine (3 cr)
HIST 3724: History of Disease, Medicine, and Health (3 cr)
HIST/STS 3734: History of Modern Biology (3 cr)
PHIL 3324: Biomedical Ethics (3 cr)
PHIL 4604: Philosophy of Biology (3 cr)

[1] Only one course of the two-course sequence can be counted toward the STS focus area requirement.

SOC 3714: Sociology of Aging (3 cr)
SOC 4704 Medical Sociology (3 cr)
STS 3284: Technology and Disability (3 cr)
STS 3314: Medical Dilemmas and Human Experience (3 cr)
WGS/SOC/STS 3324: Perspectives on the Biology of Women (3 cr)
WGS/SOC/STS 4334: Sexual Medicine (3 cr)
WGS/STS 4704: Gender and Science (3 cr)

Custom Focus Area, designed with academic advisor (9 credits)

IV. For the Bachelor of Arts Degree: Advanced perspectives from the humanities and social sciences (6 credit hours)

Two additional courses at the 3000-level or higher, and approved by the academic advisor, related to science and technology from the perspective of humanities, social sciences, or the arts. For example, a student in the Engineering and Innovation focus area might fulfill this requirement with CINE 3224 Documentary Cinema Production and CINE 3184 Cinema Production Topics.

For the Bachelor of Science Degree: Specialized study in science and technology (6 credits)

Two additional courses at the 3000-level or higher in a technical area outside of social sciences and humanities related to the student's focus area, and approved by the academic advisor. These must be courses with subject matter in science, mathematics, technology, or engineering. For example, a student in the Energy and Environment focus area pursuing the Bachelor of Science Degree might fulfill this requirement with BIOL 3114: Field and Laboratory Ecology (3), and BIOL 4004: Freshwater Ecology (3).

V. Free electives (39 credits)

Relevance to university mission and strategic planning

The BA/BS in Science, Technology, and Society is designed to harmonize with the university's goals of developing "VT-shaped individuals." First, it will provide disciplinary knowledge in the form of STS as a comprehensive way of thinking about the relationship of science and technology to society. This involves a set of specialized concepts and frameworks developed expressly for studying and understanding technical fields as thoroughly intertwined with social, cultural, and political realities.

Second, the curriculum will provide cross-cutting skills such as research design, managing collaborative projects, policy development and evaluation, writing and speaking skills for public engagement. Focus areas and specialization requirements will provide students with literacy in a specific problem area. Students in the Bachelor of Science option will undertake further study in a technical area.

Third, the program will provide guided experiential learning in the 3000-level core course on the practice of collaborative research and in the STS capstone. Students will be encouraged to pursue internships related to their STS studies. The STS Department has piloted a summer course for students pursuing internships in the National Capital Region.

Finally, the program will promote informal communal learning through co-curricular activities using existing departmental resources: undergraduate research symposia, guest speakers, presentations of student work in the ST Global student meeting held annually in the National Capital Region.

Destination areas: Students in the STS program will be able to combine their degree requirements in STS with a major in any of the planned Destination Areas. The STS program will complement work in a Destination Area by providing social science and humanities perspectives on the area's subject matter. The major will also include courses that fit within specific destination areas, allowing students to count STS courses toward a Destination Area major. For instance, our courses in Engineering and Innovation might count toward a major in Intelligent Infrastructures and Human-Centered Design.

Other planned features of the program that relate directly to the VT mission and strategic plan:

- With our department's presence in the National Capitol Region, we will initiate undergraduate activities there, offering summer courses that will provide an opportunity to combine internships with classroom study and research.
- The program combines transdisciplinary competence with specialization. It pursues general learning outcomes, with regard to interdisciplinary and transdisciplinary perspectives and methods of STS, and specialized learning outcomes, requiring the application of those tools in the process of developing deep knowledge of a particular focus area.

Justification

The establishment of a Bachelor of Arts/Bachelor of Science in Science, Technology, and Society at Virginia Tech will answer two related and growing demands. On one hand, Virginia Tech attracts many students with strong interests in science and technology, but who are not interested in majoring in engineering or in specializing solely in a scientific field. They are drawn to science and technology through personal interest and an awareness of the pervasive influence of science and technology in modern life. They will be seeking the range of skills typically acquired in a liberal arts degree, such as writing, public speaking, research, but coupled with technological literacy and a focus on specific areas of science and technology.

On the other hand, employers and graduate programs are increasingly placing a high value on college graduates who are neither engineers nor science majors, but who are effective problem solvers due to their understanding of the ways that science and technology interact with social life, culture, and politics.

Science, Technology, and Society (STS) bridges these two growing demands. It provides students with an understanding of the ways that science and technology are embedded in social life, as well as practical conceptual frameworks and methods for pursuing interdisciplinary solutions to contemporary problems. Combined with literacy in one or more areas of science and technology, analytic and writing abilities, and experience in collaborative work, these students will acquire a highly valued and marketable set of competencies.

An undergraduate STS degree is excellent preparation for any career that calls for a liberal arts degree, but with special relevance to science and technology-rich fields, such as science communication, technology marketing and management, environmental organizations, research

administration, science policy, military careers, and museum work. And it prepares students for graduate and professional study in areas such as Business, Law, Health Professions, Information Science, and Environmental Policy.

Student demand

Science, Technology, and Society is a growing field, nationally and internationally. The College Board lists STS undergraduate programs at 68 higher education institutions in the U.S., including public land-grant schools such as Penn State, University of California at Davis, and North Carolina State University. Ohio State University has recently added a concentration in STS within its Comparative Studies major. In our region, at North Carolina State University, the STS undergraduate degree program has over 110 students currently enrolled. There are no undergraduate degree programs in Science, Technology, and Society in public higher education institutions in Virginia.

The department's undergraduate courses have experienced consistently high enrollment. The introductory course in STS has filled to its capacity of 120 students for the past two years. Other courses that will be included in the degree program indicate a strong student interest in the subject matter.

We recently surveyed students enrolled in STS 1504, Introduction to Science, Technology, and Society. Out of 67 responses, 30, or 45% indicated that they were "extremely interested" or "somewhat interested" in the degree program in STS. Of the 25 students who had not yet declared a major 12, or 48% indicated that they were either "extremely interested" or "somewhat interested" in the STS degree program.

Market demand

The STS degree program combines instruction and real-world application of communication skills, both written and oral; powerful conceptual frameworks for understanding the social and cultural dimensions of science and technology; and focused knowledge of a particular problem domain. Graduates of the program will be well prepared for positions that require writing, speaking, research, and analytic skills in science- and technology-rich settings.

A growing body of knowledge suggests that pay is not only growing for graduates of liberal arts programs, but that their long-term earning potential is comparable to, or outpacing that of graduates of STEM programs. The *Wall Street Journal* writes, "When asked to define the résumé traits that matter most, however, the NACE-surveyed employers rated technical skills 10th. Four of the top five traits were hallmarks of a traditional liberal-arts education: teamwork, clear writing, problem-solving aptitude and strong oral communications. Mindful of those longer-term needs, some employers end up hiring humanities and social-sciences graduates, even if such majors aren't explicitly singled out when recruiting."[2] The *World Economic Forum* report, 'The Future of Jobs,' confirms the importance of these skills. The top five desired traits for employees in 2020 include complex problem solving, critical thinking, creativity, people management, and coordinating with others – all trademarks of degree programs emerging from the liberal arts.

[2] "Good News Liberal-Arts Majors: Your Peers Probably Won't Outearn You Forever." *Wall Street Journal*, Sept. 11, 2016. https://www.wsj.com/articles/good-news-liberal-arts-majors-your-peers-probably-wont-outearn-you-forever-1473645902

Yet these traits must be tailored for a rapidly changing and evolving world marketplace. The same report from which the above skills are derived notes that technological developments are driving commerce, development, and production in disruptive ways. "Developments in previously disjointed fields such as artificial intelligence and machine learning, robotics, nanotechnology, 3D printing and genetics and biotechnology are all building on and amplifying one another. Smart systems—homes, factories, farms, grids or entire cities—will help tackle problems ranging from supply chain management to climate change. Concurrent to this technological revolution are a set of broader socioeconomic, geopolitical and demographic developments." Thus, not only do graduates need to build desirable traits, they must be familiar with new and emerging scientific and technological environments.

Required resources

The program can be implemented with existing departmental resources. As enrollment reaches our five-year target, it may require a half-time academic advisor and an additional graduate teaching assistantship. A future faculty position in STS approaches to information technology would allow us to add an additional focus area, but is not necessary for initiating the program.

RESOURCE	ESTIMATED COSTS
Faculty	$0
Administrative Staff	$15000/yr., starting in year 5
Graduate Teaching/ Graduate Research Assistant	$32000/yr., starting in year 5 (includes tuition and stipend)
Space	$0
Library	$0
Equipment	$0
Other	$1000 (printing, web design, publicity, information events)

COLLEGE OF LIBERAL ARTS AND HUMAN SCIENCES

BACHELOR OF SCIENCE IN SCIENCE, TECHNOLOGY, AND SOCIETY

DEPARTMENT OF SCIENCE, TECHNOLOGY, AND SOCIETY

FOR STUDENTS GRADUATING IN THE 2021 CALENDAR YEAR

I. STS Degree Core Requirements (21 credit hours)

STS 1504 Introduction to Science, Technology, and Society	3 cr _____
STS 3504 The Practice of Collaborative Research for Science, Technology, and Society (Pre: 1504, and one of 2154 or 2444 of 2454 or 2254)	3 cr _____
STS 4304 Contemporary Issues in Science, Technology, and Society (Pre: 1504)	3 cr _____
STS 2154 Humanities, Technology, and the Life Sciences	3 cr _____
STS 2254 Innovation in Context	3 cr _____
STS 2444 Global Science and Technology Policy	3 cr _____
STS 2454 Science, Technology, and the Environment	3 cr _____

II. STS Focus Area Restricted Electives (9 credit hours)

Complete 9 hours of courses in **one** of the following areas

1. Engineering and Innovation 3 cr _____

ENGL 3844: Writing and Digital Media (Pre: ENGL 1106 or 1204H or COMM 1016) 3 cr _____

HIST/SOC/STS 2604: Introduction to Data in Social Context

HIST/STS 2715, 2716: History of Technology 3 cr _____

HIST 3114: United States Business History

MGT 3064: Cornerstones of Entrepreneurship and Innovation

STS/HIST 2054: Engineering Cultures

2. Energy and Environment 3 cr _____

ENGL 3534: Literature and Ecology (Pre: ENGL 1106 or 1204H or COMM 1016) 3 cr _____

GEOG/NR 1115-1116: Seeking Sustainability[1] (Pre: 1115 for 1116) 3 cr _____

GEOG 3104: Environmental Problems, Population, and Development

[1] Only one course of the two-course sequence can be counted toward the STS focus area requirement.

HIST 3144: American Environmental History
PHIL 2304: Global Ethics
STS 3334: Energy and Society
UAP/PSCI 3344: Global Environmental Issues: Interdisciplinary Perspectives
UAP 3354: Introduction to Environmental Policy and Planning

3. Life Sciences and Biomedicine 3 cr _____

ENGL 3154: Literature, Medicine, and Culture (Pre: ENGL 1106 or 1204H or COMM 1016) 3 cr _____
ENGL/STS 4314: Narrative Medicine (Pre: ENGL 3154 or 3324)
HIST 3624: Health and Illness in African History 3 cr _____
HIST 3714: War and Medicine
HIST 3724: History of Disease, Medicine, and Health
HIST/STS 3734: History of Modern Biology
PHIL 3324: Biomedical Ethics
PHIL 4604: Philosophy of Biology
SOC 3714: Sociology of Aging (Pre: 1004)
SOC 4704 Medical Sociology (Pre: 1004)
STS 3284: Technology and Disability
STS 3314: Medical Dilemmas and Human Experience
WGS/SOC/STS 3324: Perspectives on the Biology of Women (Pre: WGS 1824)
WGS/SOC/STS 4334 Sexual Medicine (Pre: WGS 1824)
WGS/STS 4704: Gender and Science (Pre: WGS 2244 or STS 1504)

4. Custom Focus Area 3 cr _____

Nine credit hours in a selected specialty of Science, Technology, and Society, approved by academic advisor 3 cr _____

3 cr _____

III. Specialized Study in Science and Technology (6 credit hours)

Two additional courses at the 3000-level or higher in a technical area outside of social sciences and humanities related to the student's focus area, and approved by the academic advisor. These must be courses with subject matter in science, mathematics, technology, or engineering. Please refer to the Prerequisites section, below. 3 cr _____

3 cr _____

IV. Pathways to General Education (45 credit hours)

STS courses outside of the 21-credit core may be counted toward the Pathways requirements.

Discourse (9 credit hours)	3 cr _____ 3 cr _____ 3 cr _____
Quantitative and Computational Thinking (9 credit hours)	3 cr _____ 3 cr _____ 3 cr _____
Reasoning in the Natural Sciences (6 credit hours)	3 cr _____ 3 cr _____
Critique and Practice in Design and the Arts (6 credit hours)	3 cr _____ 3 cr _____
Reasoning in the Social Sciences (6 credit hours)	3 cr _____ 3 cr _____
Critical Thinking in the Humanities (6 credit hours)	3 cr _____ 3 cr _____
Critical Analysis of Identity and Equity in the United States	3 cr_____
Pathways to General Education Credits can also be fulfilled through a Pathways Minor or Alternative Pathway	

V. Free electives (39 credit hours)

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

VI. Foreign Language

Students who did not successfully complete at least two years of a single foreign, classical, or sign language during high school must successfully complete six semester hours of a single foreign, classical, or sign language at the college level. Courses taken to meet this requirement do not count toward the hours required for graduation. Please consult the Undergraduate Catalog for details.

Prerequisites

Some courses listed on this checksheet have prerequisites, please consult the University Course Catalog, or check with your advisor.

Graduation Requirements

- Minimum of 120 credit hours for the degree
- In-major GPA (courses in sections I, II, III, above) must be 2.0 or higher.
- Minumum overall GPA of 2.0.

Satisfactory Progress Policy

In addition to the satisfactory progress toward a degree policy required by the University, satisfactory progress toward a B.S. in STS requires that upon having attempted 72 semester hours (including transfer, AP, advanced standing, and credit by exam) an STS student must have:

- Completed at least 9 credits of the STS core requirements (Section I, above)
- At least a 2.0 overall GPA
- At least a 2.0 in-major GPA.

In-major courses include all STS core courses (Section I), Focus Area requirements (II), and Specialized Study in Science and Technology (III).

Bachelor of Arts and Bachelor of Science in Science, Technology, and Society

DANIEL BRESLAU
Department of Science, Technology, and Society (STS)

VIRGINIA TECH™

What is STS?

- Studies the relationship of science and technology to society, culture, politics
- Draws on concepts and methods from the Social Sciences and Humanities
- Emphasizes empirical research
- Provides practical ideas for managing the social and ethical consequences of emerging knowledge and technologies

STS asks questions like:

- How will our society and lifestyles change with the transition to renewable sources of energy?
- What are the ethical issues raised by recent developments in genetics?
- How has the organization of tech workplaces resulted in the marginalization of women?

Core Learning Outcomes

Upon completing the program, students will be able to:

- Identify ways in which science, medicine and technology influence, and are influenced by, social, cultural and political contexts.
- Apply STS concepts and frameworks in the analysis of contemporary developments within scientific, technological, and medical domains.
- Evaluate and formulate policies directed at contemporary problems in science, technology, and medicine.

Student Demand

- Average annual enrollment in Intro to STS, last 5 years: **164**
- Student demand survey (Spring, 2017):
  - **45%** of surveyed University Studies (undeclared) students would be Extremely Likely or Somewhat Likely to enroll in the proposed program
  - **37%** of surveyed students in Introduction to STS would be Extremely Likely or Somewhat Likely to enroll in the proposed program

The program is a good fit for students with strong skills and interests in liberal arts (writing, speaking, collaborative work, research, critical thinking) and an abiding interest in science and technology

Careers for STS Graduates

Public engagement

- Museum and non-profit work
- Environmental research and advocacy
- Science communication

Tech sector

- Product development
- Marketing
- Research Analyst

Graduate and professional school

- Law School
- Pre-Health Professions
- Information Science
- Environmental Policy

Employer Interest

Including, but not limited to:

- US Department of Agriculture, Deputy Administrator for Organic Program
- Sierra Club, Director of Beyond Coal Campaign
- Chemical Heritage Foundation, Director, Institute for Research
- Mitre Corporation (Federal Government Research Contractor), Portfolio Manager

What potential employers have said

There will be a strong demand for graduates with an STS degree in the metro Washington DC area where questions of policy and expertise permeate every aspect of a wide range of industries, from biotech, public health, cyber, management consulting, big data, advanced manufacturing, remote surveillance, defense, and homeland security.

There are many skills we can develop in our new employees, but the ability and willingness to move fluidly between the languages and cultures of science and the social sciences needs to be in place before they arrive. Students who can confidently move between these worlds are few and far between -- especially at the undergraduate level.

Thank you!

RESOLUTION TO APPROVE NEW DEGREE, BACHELOR OF SCIENCE IN SCIENCE, TECHNOLOGY, AND SOCIETY

WHEREAS, emerging science and technology present new and unanticipated social, political, and ethical consequences; and

WHEREAS, science, technology, and society (STS) is a growing interdisciplinary field that brings together conceptual and methodological frameworks from the social sciences and humanities to develop ways of understanding and intervening in the relationship of science and technology to society; and

WHEREAS, organizations of many kinds are reporting a need for college graduates with a combination of liberal arts skills – writing, research, critical thinking, collaboration – and advanced scientific or technological literacy; and

WHEREAS, there is currently no undergraduate degree in science, technology, and society offered at institutions of higher education in Virginia; and

WHEREAS, the bachelor of science in STS embodies the elements of the "VT-shaped Individual," with depth in the specialized concepts and frameworks of STS, transdisciplinary skills, and problem-driven, experiential learning; and

WHEREAS, the Department of Science, Technology, and Society at Virginia Tech is a leading department in graduate instruction and research in the field and already offers a range of undergraduate courses, providing about 2,000 credit hours of undergraduate instruction per year: now,

THEREFORE, BE IT RESOLVED that the bachelor of science in science, technology, and society be approved effective spring 2019 and the proposal forwarded to the State Council of Higher Education for Virginia (SCHEV) for approval.

RECOMMENDATION:

That the above resolution recommending the establishment of the bachelor of science in science, technology, and society be approved.

June 4, 2018

Virginia Tech Degree Proposal
Bachelor of Arts/Bachelor of Science in Science, Technology, and Society
(CIP: 30.1501)

Type of degree action: New

Program Description

The Department of Science, Technology, and Society is proposing a new Undergraduate Degree Program in Science, Technology, and Society. The program will offer both a Bachelor of Arts and a Bachelor of Science. The program anticipates admitting its first students in spring of 2019, and will begin awarding degrees in 2021.

The field of Science, Technology, and Society studies the relationship of science and technology to their social, political, and cultural contexts. It examines the ways that the development of technologies and the course of scientific research are shaped by their social settings, and in turn, the ways that scientific and technological developments impact society.

As an interdisciplinary field, Science, Technology, and Society draws from the social sciences and humanities, particularly from Anthropology, Sociology, History, and Philosophy. The field has also developed its own concepts and frameworks, which have proven particularly revealing in the study of the social dimensions of technical fields. Central concerns of the field include the politics of expertise, public deliberation on science and technology policy, the social consequences of molecular biology and associated technologies, innovation as a social process, information technologies and social change.

In addition to advancing knowledge of this subject area, the field of STS has a strong tradition of practical involvement in the interface between society and the technical fields of science and technology. STS scholars and practitioners work with scientists and engineers to incorporate a greater awareness of the social and ethical consequences of their work into their professional work itself. And STS-trained professionals work with citizens' groups and other stakeholders to translate and interpret scientific and technological developments in terms of their risks, benefits, and other social consequences. They can often facilitate informed public involvement in deliberation over policy responses. Faculty in STS at Virginia Tech are already working on projects involving reshaping the training of engineers, developing strategies for disaster response, and involving citizens in research on environmental health risks.

The program will build on existing strengths of faculty in the Department of Science, Technology, and Society and the graduate program in Science and Technology Studies. Active scholarship of faculty, with strengths in science and technology policy, energy and environmental issues, engineering studies, biomedicine and society, will expose undergraduates to the state of the art in STS research and public outreach.

The Undergraduate Degree Program in STS has six emphases:

1. The study of STS as a set of perspectives, concepts, and methods that apply across a broad range of issues for research and active intervention involving science and technology.
2. A focus on contemporary problems involving science and technology, developing approaches to those problems that take into account their social dimensions and social consequences.
3. Real-world engagement through experiential and collaborative learning.

4. Acquisition of a set of transdisciplinary skills, including technological literacy, professional presentations, research design, critical thinking, and managing collaborative projects.
5. **For the Bachelor of Arts degree**, advanced knowledge in humanistic and social science perspectives on science and technology.
6. **For the Bachelor of Science degree,** technical literacy at an advanced undergraduate level, in a specialized area of science and technology.

In the degree's core, students will learn general conceptual tools and perspectives of STS. But beyond the introductory course (STS 1504), these are taught in conjunction with specific contemporary problem areas: environment, biomedicine and the life sciences, global science and technology policy, and innovation.

The core includes an innovative course on the practice of collaborative research (STS 3504 Collaborative Research in Science, Technology, and Society). The course combines research methods with hands-on experience in collaborative work on a social problem involving science and/or technology. During alternate years, the collaborative methods course will be coupled with the STS Department's Choices and Challenges Forum. This is a public forum on an area of science and technology that is of pressing public concern. Students in the STS Collaborative Methods course will participate in developing information materials for the forum, designing background sessions, and will interact with invited panelists in a closed workshop setting.

Furthermore, all students in the program will specialize in a focus area, where they will take 9 credit hours to acquire technical literacy and deeper knowledge of one area. The focus areas will initially consist of Energy and Environment, Medicine and Life Sciences, and Engineering and Innovation, with a fourth option consisting of a custom focus area that students design in consultation with their advisor.

The capstone, STS 4304, will provide an opportunity to pursue supervised individual research related to the student's focus area, while gaining experience in presentation and critique in a seminar setting. Students in the STS program will compile a research portfolio based on their projects in the Collaborative Methods course and the STS Capstone.

Students will complete the program with either a Bachelor of Arts or a Bachelor of Science degree. The BA is appropriate for students seeking a broad liberal arts degree, requiring additional upper-level courses in perspectives on science and technology from the humanities, social science and arts. The Bachelor of Science allows students to combine the STS requirements with a more advanced program of study in a scientific or technological area that is linked to their STS focus area.

Curriculum Summary

I. Pathways to General Education (45 credits)

Distributive Pathway:

- Discourse (9 credits)
- Quantitative and Computational Thinking (9 credits)
- Reasoning in the Natural Sciences (6 credits)
- Critique and Practice in Design and the Arts (6 credits)
- Reasoning in the Social Sciences (6 credits)

Critical Thinking in the Humanities (6 credits)
Critical Analysis of Identity and Equity in the United States (3 credits)

Pathways requirements may also be fulfilled through a Pathways Minor or Alternative Pathway.

II. STS Degree Core Requirement (21 credit hours)

STS Core Sequence

STS 1504: Introduction to Science, Technology, and Society (3 cr)
STS 3504: The Practice of Collaborative Research in STS (3 cr)
STS 4304: Contemporary Issues in Science, Technology, and Society (3 cr)

Core area requirements

STS 2154: Humanities, Technology and the Life Sciences (3 cr)
STS 2254: Innovation in Context (3 cr)
STS 2454: Science, Technology, and the Environment (3 cr)
STS 2444: Global Science and Technology Policy (3 cr)

III. Focus Area Restricted Electives (9 credit hours)
Nine credit hours in one of the following focus areas

Energy and Environment (three of the following):

ENGL 3534: Literature and Ecology (3 cr)
GEOG/NR 1115-1116: Seeking Sustainability[1] (3 cr)
GEOG 3104: Environmental Problems, Population, and Development (3 cr)
HIST 3144: American Environmental History (3 cr)
PHIL 2304: Global Ethics (3 cr)
STS 3334: Energy and Society (3 cr)
UAP/PSCI 3344: Global Environmental Issues: Interdisciplinary Perspectives (3 cr)
UAP 3354: Introduction to Environmental Policy and Planning (3 cr)

Engineering and Innovation (three of the following):

ENGL 3844: Writing and Digital Media (3 cr)
HIST/SOC/STS 2604: Introduction to Data in Social Context (3 cr)
HIST/STS 2715, 2716: History of Technology (3 cr)
HIST 3114: United States Business History (3 cr)
MGT 3064: Cornerstones of Entrepreneurship and Innovation (3 cr)
STS/HIST 2054: Engineering Cultures (3 cr)

Life Sciences and Biomedicine (three of the following):

ENGL 3154: Literature, Medicine, and Culture (3 cr)
ENGL/STS 4314: Narrative Medicine (3 cr)
HIST 3624: Health and Illness in African History (3 cr)
HIST 3714: War and Medicine (3 cr)
HIST 3724: History of Disease, Medicine, and Health (3 cr)
HIST/STS 3734: History of Modern Biology (3 cr)
PHIL 3324: Biomedical Ethics (3 cr)
PHIL 4604: Philosophy of Biology (3 cr)

[1] Only one course of the two-course sequence can be counted toward the STS focus area requirement.

SOC 3714: Sociology of Aging (3 cr)
SOC 4704 Medical Sociology (3 cr)
STS 3284: Technology and Disability (3 cr)
STS 3314: Medical Dilemmas and Human Experience (3 cr)
WGS/SOC/STS 3324: Perspectives on the Biology of Women (3 cr)
WGS/SOC/STS 4334: Sexual Medicine (3 cr)
WGS/STS 4704: Gender and Science (3 cr)

Custom Focus Area, designed with academic advisor (9 credits)

IV. For the Bachelor of Arts Degree: Advanced perspectives from the humanities and social sciences (6 credit hours)

Two additional courses at the 3000-level or higher, and approved by the academic advisor, related to science and technology from the perspective of humanities, social sciences, or the arts. For example, a student in the Engineering and Innovation focus area might fulfill this requirement with CINE 3224 Documentary Cinema Production and CINE 3184 Cinema Production Topics.

For the Bachelor of Science Degree: Specialized study in science and technology (6 credits)

Two additional courses at the 3000-level or higher in a technical area outside of social sciences and humanities related to the student's focus area, and approved by the academic advisor. These must be courses with subject matter in science, mathematics, technology, or engineering. For example, a student in the Energy and Environment focus area pursuing the Bachelor of Science Degree might fulfill this requirement with BIOL 3114: Field and Laboratory Ecology (3), and BIOL 4004: Freshwater Ecology (3).

V. Free electives (39 credits)

Relevance to university mission and strategic planning

The BA/BS in Science, Technology, and Society is designed to harmonize with the university's goals of developing "VT-shaped individuals." First, it will provide disciplinary knowledge in the form of STS as a comprehensive way of thinking about the relationship of science and technology to society. This involves a set of specialized concepts and frameworks developed expressly for studying and understanding technical fields as thoroughly intertwined with social, cultural, and political realities.

Second, the curriculum will provide cross-cutting skills such as research design, managing collaborative projects, policy development and evaluation, writing and speaking skills for public engagement. Focus areas and specialization requirements will provide students with literacy in a specific problem area. Students in the Bachelor of Science option will undertake further study in a technical area.

Third, the program will provide guided experiential learning in the 3000-level core course on the practice of collaborative research and in the STS capstone. Students will be encouraged to pursue internships related to their STS studies. The STS Department has piloted a summer course for students pursuing internships in the National Capital Region.

Finally, the program will promote informal communal learning through co-curricular activities using existing departmental resources: undergraduate research symposia, guest speakers, presentations of student work in the ST Global student meeting held annually in the National Capital Region.

Destination areas: Students in the STS program will be able to combine their degree requirements in STS with a major in any of the planned Destination Areas. The STS program will complement work in a Destination Area by providing social science and humanities perspectives on the area's subject matter. The major will also include courses that fit within specific destination areas, allowing students to count STS courses toward a Destination Area major. For instance, our courses in Engineering and Innovation might count toward a major in Intelligent Infrastructures and Human-Centered Design.

Other planned features of the program that relate directly to the VT mission and strategic plan:

- With our department's presence in the National Capitol Region, we will initiate undergraduate activities there, offering summer courses that will provide an opportunity to combine internships with classroom study and research.
- The program combines transdisciplinary competence with specialization. It pursues general learning outcomes, with regard to interdisciplinary and transdisciplinary perspectives and methods of STS, and specialized learning outcomes, requiring the application of those tools in the process of developing deep knowledge of a particular focus area.

Justification

The establishment of a Bachelor of Arts/Bachelor of Science in Science, Technology, and Society at Virginia Tech will answer two related and growing demands. On one hand, Virginia Tech attracts many students with strong interests in science and technology, but who are not interested in majoring in engineering or in specializing solely in a scientific field. They are drawn to science and technology through personal interest and an awareness of the pervasive influence of science and technology in modern life. They will be seeking the range of skills typically acquired in a liberal arts degree, such as writing, public speaking, research, but coupled with technological literacy and a focus on specific areas of science and technology.

On the other hand, employers and graduate programs are increasingly placing a high value on college graduates who are neither engineers nor science majors, but who are effective problem solvers due to their understanding of the ways that science and technology interact with social life, culture, and politics.

Science, Technology, and Society (STS) bridges these two growing demands. It provides students with an understanding of the ways that science and technology are embedded in social life, as well as practical conceptual frameworks and methods for pursuing interdisciplinary solutions to contemporary problems. Combined with literacy in one or more areas of science and technology, analytic and writing abilities, and experience in collaborative work, these students will acquire a highly valued and marketable set of competencies.

An undergraduate STS degree is excellent preparation for any career that calls for a liberal arts degree, but with special relevance to science and technology-rich fields, such as science communication, technology marketing and management, environmental organizations, research

administration, science policy, military careers, and museum work. And it prepares students for graduate and professional study in areas such as Business, Law, Health Professions, Information Science, and Environmental Policy.

Student demand

Science, Technology, and Society is a growing field, nationally and internationally. The College Board lists STS undergraduate programs at 68 higher education institutions in the U.S., including public land-grant schools such as Penn State, University of California at Davis, and North Carolina State University. Ohio State University has recently added a concentration in STS within its Comparative Studies major. In our region, at North Carolina State University, the STS undergraduate degree program has over 110 students currently enrolled. There are no undergraduate degree programs in Science, Technology, and Society in public higher education institutions in Virginia.

The department's undergraduate courses have experienced consistently high enrollment. The introductory course in STS has filled to its capacity of 120 students for the past two years. Other courses that will be included in the degree program indicate a strong student interest in the subject matter.

We recently surveyed students enrolled in STS 1504, Introduction to Science, Technology, and Society. Out of 67 responses, 30, or 45% indicated that they were "extremely interested" or "somewhat interested" in the degree program in STS. Of the 25 students who had not yet declared a major 12, or 48% indicated that they were either "extremely interested" or "somewhat interested" in the STS degree program.

Market demand

The STS degree program combines instruction and real-world application of communication skills, both written and oral; powerful conceptual frameworks for understanding the social and cultural dimensions of science and technology; and focused knowledge of a particular problem domain. Graduates of the program will be well prepared for positions that require writing, speaking, research, and analytic skills in science- and technology-rich settings.

A growing body of knowledge suggests that pay is not only growing for graduates of liberal arts programs, but that their long-term earning potential is comparable to, or outpacing that of graduates of STEM programs. The *Wall Street Journal* writes, "When asked to define the résumé traits that matter most, however, the NACE-surveyed employers rated technical skills 10th. Four of the top five traits were hallmarks of a traditional liberal-arts education: teamwork, clear writing, problem-solving aptitude and strong oral communications. Mindful of those longer-term needs, some employers end up hiring humanities and social-sciences graduates, even if such majors aren't explicitly singled out when recruiting."[2] The *World Economic Forum* report, 'The Future of Jobs,' confirms the importance of these skills. The top five desired traits for employees in 2020 include complex problem solving, critical thinking, creativity, people management, and coordinating with others – all trademarks of degree programs emerging from the liberal arts.

[2] "Good News Liberal-Arts Majors: Your Peers Probably Won't Outearn You Forever." *Wall Street Journal*, Sept. 11, 2016. https://www.wsj.com/articles/good-news-liberal-arts-majors-your-peers-probably-wont-outearn-you-forever-1473645902

Yet these traits must be tailored for a rapidly changing and evolving world marketplace. The same report from which the above skills are derived notes that technological developments are driving commerce, development, and production in disruptive ways. "Developments in previously disjointed fields such as artificial intelligence and machine learning, robotics, nanotechnology, 3D printing and genetics and biotechnology are all building on and amplifying one another. Smart systems—homes, factories, farms, grids or entire cities—will help tackle problems ranging from supply chain management to climate change. Concurrent to this technological revolution are a set of broader socioeconomic, geopolitical and demographic developments." Thus, not only do graduates need to build desirable traits, they must be familiar with new and emerging scientific and technological environments.

Required resources

The program can be implemented with existing departmental resources. As enrollment reaches our five-year target, it may require a half-time academic advisor and an additional graduate teaching assistantship. A future faculty position in STS approaches to information technology would allow us to add an additional focus area, but is not necessary for initiating the program.

RESOURCE	ESTIMATED COSTS
Faculty	$0
Administrative Staff	$15000/yr., starting in year 5
Graduate Teaching/ Graduate Research Assistant	$32000/yr., starting in year 5 (includes tuition and stipend)
Space	$0
Library	$0
Equipment	$0
Other	$1000 (printing, web design, publicity, information events)

COLLEGE OF LIBERAL ARTS AND HUMAN SCIENCES

BACHELOR OF ARTS IN SCIENCE, TECHNOLOGY, AND SOCIETY

DEPARTMENT OF SCIENCE, TECHNOLOGY, AND SOCIETY

FOR STUDENTS GRADUATING IN THE 2021 CALENDAR YEAR

I. STS Degree Core Requirements (21 credit hours)

STS 1504 Introduction to Science, Technology, and Society	3 cr _____
STS 3504 The Practice of Collaborative Research for Science, Technology, and Society (Pre: 1504, and one of 2154 or 2444 of 2454 or 2254)	3 cr _____
STS 4304 Contemporary Issues in Science, Technology, and Society (Pre: 1504)	3 cr _____
STS 2154 Humanities, Technology, and the Life Sciences	3 cr _____
STS 2254 Innovation in Context	3 cr _____
STS 2444 Global Science and Technology Policy	3 cr _____
STS 2454 Science, Technology, and the Environment	3 cr _____

II. STS Focus Area Restricted Electives (9 credit hours)

Complete 9 hours of courses in **one** of the following areas

1. Engineering and Innovation 3 cr _____

ENGL 3844: Writing and Digital Media (Pre: ENGL 1106 or 1204H or COMM 1016) 3 cr _____

HIST/SOC/STS 2604: Introduction to Data in Social Context

HIST/STS 2715, 2716: History of Technology 3 cr _____

HIST 3114: United States Business History

MGT 3064: Cornerstones of Entrepreneurship and Innovation

STS/HIST 2054: Engineering Cultures

2. Energy and Environment 3 cr _____

ENGL 3534: Literature and Ecology (Pre: ENGL 1106 or 1204H or COMM 1016) 3 cr _____

GEOG/NR 1115-1116: Seeking Sustainability[1] (Pre: 1115 for 1116) 3 cr _____

GEOG 3104: Environmental Problems, Population, and Development

[1] Only one course of the two-course sequence can be counted toward the STS focus area requirement.

HIST 3144: American Environmental History
PHIL 2304: Global Ethics
STS 3334: Energy and Society
UAP/PSCI 3344: Global Environmental Issues: Interdisciplinary Perspectives
UAP 3354: Introduction to Environmental Policy and Planning

3. Life Sciences and Biomedicine 3 cr _____

ENGL 3154: Literature, Medicine, and Culture (Pre: ENGL 1106 or 1204H or COMM 1016) 3 cr _____
ENGL/STS 4314: Narrative Medicine (Pre: ENGL 3154 or 3324)
HIST 3624: Health and Illness in African History 3 cr _____
HIST 3714: War and Medicine
HIST 3724: History of Disease, Medicine, and Health
HIST/STS 3734: History of Modern Biology
PHIL 3324: Biomedical Ethics
PHIL 4604: Philosophy of Biology
SOC 3714: Sociology of Aging (Pre: 1004)
SOC 4704 Medical Sociology (Pre: 1004)
STS 3284: Technology and Disability
STS 3314: Medical Dilemmas and Human Experience
WGS/SOC/STS 3324: Perspectives on the Biology of Women (Pre: WGS 1824)
WGS/SOC/STS 4334 Sexual Medicine (Pre: WGS 1824)
WGS/STS 4704: Gender and Science (Pre: WGS 2244 or STS 1504)

4. Custom Focus Area 3 cr _____

Nine credit hours in a selected specialty of Science, Technology, and Society, approved by academic advisor 3 cr _____

3 cr _____

III. Advanced Perspectives in the Humanities and Social Sciences (6 credit hours)

Two additional courses at the 3000-level or higher, and approved by the academic advisor, related to science and technology from the perspective of humanities, social sciences, or the arts. Please refer to the Prerequisites section, below. 3 cr _____

3 cr _____

IV. Pathways to General Education (45 credit hours)

STS courses outside of the 21-credit core may be counted toward the Pathways requirements.

Discourse (9 credit hours)	3 cr _____ 3 cr _____ 3 cr _____
Quantitative and Computational Thinking (9 credit hours)	3 cr _____ 3 cr _____ 3 cr _____
Reasoning in the Natural Sciences (6 credit hours)	3 cr _____ 3 cr _____
Critique and Practice in Design and the Arts (6 credit hours)	3 cr _____ 3 cr _____
Reasoning in the Social Sciences (6 credit hours)	3 cr _____ 3 cr _____
Critical Thinking in the Humanities (6 credit hours)	3 cr _____ 3 cr _____
Critical Analysis of Identity and Equity in the United States (3 credit hours)	3 cr_____
Pathways to General Education Credits can also be fulfilled through a Pathways Minor or Alternative Pathway	

V. Free electives (39 credit hours)

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

VI. Foreign Language

Students who did not successfully complete at least two years of a single foreign, classical, or sign language during high school must successfully complete six semester hours of a single foreign, classical, or sign language at the college level. Courses taken to meet this requirement

do not count toward the hours required for graduation. Please consult the Undergraduate Catalog for details.

Prerequisites

Some courses listed on this checksheet have prerequisites, please consult the University Course Catalog, or check with your advisor.

Graduation Requirements

- Minimum of 120 credit hours for the degree
- In-major GPA (courses in sections I, II, III, above) must be 2.0 or higher.
- Minumum overall GPA of 2.0.

Satisfactory Progress Policy

In addition to the satisfactory progress toward a degree policy required by the University, satisfactory progress toward a B.A. in STS requires that upon having attempted 72 semester hours (including transfer, AP, advanced standing, and credit by exam) an STS student must have:

- Completed at least 9 credits of the STS core requirements (Section I, above)
- At least a 2.0 overall GPA
- At least a 2.0 in-major GPA.

In-major courses include all STS core courses (Section I), Focus Area requirements (II), and Advanced Perspectives in the Humanities and Social Sciences requirements (III).

Bachelor of Arts and Bachelor of Science in Science, Technology, and Society

DANIEL BRESLAU
Department of Science, Technology, and Society (STS)

VIRGINIA TECH™

What is STS?

- Studies the relationship of science and technology to society, culture, politics
- Draws on concepts and methods from the Social Sciences and Humanities
- Emphasizes empirical research
- Provides practical ideas for managing the social and ethical consequences of emerging knowledge and technologies

STS asks questions like:

- How will our society and lifestyles change with the transition to renewable sources of energy?
- What are the ethical issues raised by recent developments in genetics?
- How has the organization of tech workplaces resulted in the marginalization of women?

Core Learning Outcomes

Upon completing the program, students will be able to:

- Identify ways in which science, medicine and technology influence, and are influenced by, social, cultural and political contexts.
- Apply STS concepts and frameworks in the analysis of contemporary developments within scientific, technological, and medical domains.
- Evaluate and formulate policies directed at contemporary problems in science, technology, and medicine.

Student Demand

- Average annual enrollment in Intro to STS, last 5 years: **164**
- Student demand survey (Spring, 2017):
  - **45%** of surveyed University Studies (undeclared) students would be Extremely Likely or Somewhat Likely to enroll in the proposed program
  - **37%** of surveyed students in Introduction to STS would be Extremely Likely or Somewhat Likely to enroll in the proposed program

The program is a good fit for students with strong skills and interests in liberal arts (writing, speaking, collaborative work, research, critical thinking) and an abiding interest in science and technology

Careers for STS Graduates

Public engagement

- Museum and non-profit work
- Environmental research and advocacy
- Science communication

Tech sector

- Product development
- Marketing
- Research Analyst

Graduate and professional school

- Law School
- Pre-Health Professions
- Information Science
- Environmental Policy

Employer Interest

Including, but not limited to:

- US Department of Agriculture, Deputy Administrator for Organic Program
- Sierra Club, Director of Beyond Coal Campaign
- Chemical Heritage Foundation, Director, Institute for Research
- Mitre Corporation (Federal Government Research Contractor), Portfolio Manager

What potential employers have said

There will be a strong demand for graduates with an STS degree in the metro Washington DC area where questions of policy and expertise permeate every aspect of a wide range of industries, from biotech, public health, cyber, management consulting, big data, advanced manufacturing, remote surveillance, defense, and homeland security.

There are many skills we can develop in our new employees, but the ability and willingness to move fluidly between the languages and cultures of science and the social sciences needs to be in place before they arrive. Students who can confidently move between these worlds are few and far between -- especially at the undergraduate level.

Thank you!

RESOLUTION APPROVING AGREEMENT TO AMEND THE ARTICLES OF INCORPORATON OF THE MONTGOMERY REGIONAL SOLID WASTE AUTHORITY AND TO EXTEND TERM OF USER AGREEMENT BETWEEN THE AUTHORITY AND THE UNIVERSITY

The university, along with Montgomery County and the Towns of Blacksburg and Christiansburg, formed a Solid Waste Authority to dispose of solid waste and recyclable materials on a regional basis. The Authority is led by a five member Board of Directors and the terms of office for all members run concurrently. The Authority and the participating jurisdictions recommend changing the Articles of Incorporation to provide staggered terms of office for the members of the Authority's Board of Directors.

The Authority and the participating jurisdictions also recommend extending each participating locality's User Agreement with the Authority (for the provision of solid waste disposal and recycling services) to June 20, 2040.

RESOLUTION APPROVING AGREEMENT TO AMEND THE ARTICLES OF INCORPORATON OF THE MONTGOMERY REGIONAL SOLID WASTE AUTHORITY AND TO EXTEND TERM OF USER AGREEMENT BETWEEN THE AUTHORITY AND THE UNIVERSITY

WHEREAS, Virginia Polytechnic Institute and State University **(the "University")**, together with Montgomery County, Virginia, the Town of Blacksburg, Virginia and the Town of Christiansburg, Virginia **(together, the "Participating Jurisdictions")**, created the Montgomery Regional Solid Waste Authority **(the "Authority")** to enable the Participating Jurisdictions to dispose of solid waste and recycle recyclable materials on a regional basis by causing Articles of Incorporation forming the Authority **(the "Articles of Incorporation")** to be filed with the Virginia State Corporation Commission; and

WHEREAS, the Articles of Incorporation presently provide for terms of office of all members of the Authority's Board of Directors to run concurrently, with the next four year term expiration date being June 30, 2018, and the Authority and the Participating Jurisdictions desire to provide for staggered terms of office for members of the Authority's Board of Directors as stated below; and

WHEREAS, the Participating Jurisdictions have each also entered into identical User Agreements with the Authority **(the "User Agreements")** for the Authority to provide solid waste disposal and recycling services for each of the Participating Jurisdictions; and

WHEREAS, the User Agreements have a term beginning on July 1, 1995 and ending on June 30, 2025, and the Participating Jurisdictions desire to extend such term to June 30, 2040; and

WHEREAS, there has been presented to this meeting a proposed agreement among the University, the other Participating Jurisdictions and the Authority entitled "Agreement to Amend the Articles of Incorporation of the Montgomery Regional Solid Waste Authority and to Extend Term of User Agreements Between the Authority and Participating Jurisdictions" **(the "Agreement")**, which Agreement incorporates therein Articles of Amendment to Articles of Incorporation of Montgomery Regional Solid Waste Authority **(the "Articles of Amendment")** that are attached thereto; and

WHEREAS, a public hearing has been held on behalf of the Board of Visitors of the University concerning the proposed approval of the Board of Visitors of the Agreement and the Board of Visitors has received the report of the Vice President for Operations of the University **(the "Vice President for Operations")** as the University's representative with a summary of comments made at the public hearing.

NOW THEREFORE, BE IT RESOLVED by the Board of Visitors of the University that the forms of the Agreement and the Articles of Amendment are approved and the

Vice President for Operations is authorized to execute the Agreement and the Articles of Amendment in substantially the forms presented to this meeting; and

BE IT FURTHER RESOLVED, upon execution of the Agreement and the Articles of Amendment by the other signatories thereto, the Vice President for Operations is authorized to take all actions to cause the Articles of Amendment to be filed with the Virginia State Corporation Commission together with any other necessary documents, and to take all actions required by law to be taken prior to such filing; and

BE IT FURTHER RESOLVED, this Resolution shall take effect immediately on June 4, 2018.

RECOMMENDATION:

That the above resolution authorizing the Vice President for Operations to execute the User Agreement and to execute and file the Articles of Amendment for the Montgomery Regional Solid Waste Authority be approved.

CERTIFICATION OF ADOPTION OF RESOLUTION

The undersigned Secretary of the Board of Visitors of Virginia Polytechnic Institute and State University certifies that the Resolution set forth above was adopted on June 4, 2018 in an open meeting.

Signed this 4 day of June, 2018.

By: _____
Kim O'Rourke, Secretary of the Board of Visitors
Virginia Polytechnic and State University

AGREEMENT TO AMEND THE ARTICLES OF INCORPORATION OF THE MONTGOMERY REGIONAL SOLID WASTE AUTHORITY AND TO EXTEND TERM OF USER AGREEMENTS BETWEEN THE AUTHORITY AND PARTICIPATING JURISDICTIONS

WHEREAS, Montgomery County, Virginia **("Montgomery County")**, the Town of Blacksburg, Virginia **(the "Town of Blacksburg")**, the Town of Christiansburg, Virginia **(the "Town of Christiansburg")** and Virginia Polytechnic Institute and State University **("Virginia Tech" and, together with Montgomery County, the Town of Blacksburg and the Town of Christiansburg, the "Participating Jurisdictions")**, in accordance with the requirements of the Virginia Water and Waste Authorities Act **(the "Act")** and by causing Articles of Incorporation **(the "Articles of Incorporation")** to be filed with the Virginia State Corporation Commission on December 14, 1994 did create the Montgomery Regional Solid Waste Authority **(the "Authority")** as an authority under the Act for the benefit of the Participating Jurisdictions; and

WHEREAS, the Articles of Incorporation presently provide for terms of office of all members of the Authority's Board of Directors to run concurrently, with the next term expiration date being June 30, 2018; and

WHEREAS, the Participating Jurisdictions desire to the amend the Articles of Incorporation to provide for staggered terms of office for members of the Authority's Board of Directors as stated below; and

WHEREAS, each of the Participating Jurisdictions entered into an identical User Agreement with the Authority for the Authority to provide solid waste disposal and recycling services for each of the Participating Jurisdictions; and

WHEREAS, the User Agreement entered into by the Town of Christiansburg is dated June 20, 1995 **(the "Town of Christiansburg User Agreement")**, the User Agreement entered

into by Virginia Tech is dated June 26, 1995 **(the "Virginia Tech User Agreement")**, the User Agreement entered into by the Town of Blacksburg is dated June 20, 1995 **(the "Town of Blacksburg User Agreement")** and the User Agreement entered into by Montgomery County is dated July 17, 1995 **(the "Montgomery County User Agreement" and, together with the Town of Christiansburg User Agreement, the Virginia Tech User Agreement and the Town of Blacksburg User agreement, the "User Agreements")**; and

WHEREAS, for over 22 years the Authority has provided solid waste disposal and recycling services to the Participating Jurisdictions under the regional framework provided by the Articles of Incorporation and the User Agreements that has allowed the Participating Jurisdictions to take advantage of economies of scale; and

WHEREAS, the User Agreements have a term beginning on July 1, 1995 and ending on June 30, 2025, and the Participating Jurisdictions desire to extend such term to June 30, 2040; and

WHEREAS, notice has been provided and public hearings have been held in accordance with the requirements of the Act regarding this Agreement.

NOW, THEREFORE, the Participating Jurisdictions agree as follows:

1. The Articles of Incorporation of the Authority shall be amended to reflect that for the terms of office of the five (5) members of the Board of the Authority beginning on July 1, 2018, the member representing Montgomery County shall have a term of three (3) years, the member representing Town of Blacksburg shall have a term of two (2) years, the member representing Town of Christiansburg shall have a term of one (1) years, the member representing Virginia Polytechnic Institute and State University shall have a term of four (4) years and the at-large member shall have a term of two

(2) years, that subsequent to these terms, each member shall be appointed for terms of four (4) years each, and members may be reappointed to succeed themselves, all as set forth in the attached form of Articles of Amendment to Articles of Incorporation of the Authority.

2. The Town of Christiansburg User Agreement, the Virginia Tech User Agreement, the Town of Blacksburg User Agreement and the Montgomery County User Agreement are each amended by the respective parties thereto to provide in Article III that the term of each such User Agreement shall terminate on June 30, 2040. All other provisions of the User Agreements shall remain unchanged.

MONTGOMERY COUNTY, VIRGINIA

By:_____
County Administrator

ATTEST:

_____
Clerk

TOWN OF BLACKSBURG, VIRGINIA

By:_____
Town Manager

ATTEST:

_____
Clerk

TOWN OF CHRISTANSBURG, VIRGINIA

By:_____
Town Manager

ATTEST:

_____
Clerk

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

By:_____
Vice President for Operations

ATTEST:

_____
Secretary

MONTGOMERY REGIONAL SOLID WASTE AUTHORITY

By:_____
Executive Director

ATTEST:

_____
Secretary

Form of Articles of Amendment

ARTICLES OF AMENDMENT TO ARTICLES OF INCORPORATION OF MONTGOMERY REGIONAL SOLID WASTE AUTHORITY

Montgomery County, Virginia, the Town of Blacksburg, Virginia, the Town of Christiansburg, Virginia and Virginia Polytechnic Institute and State University, through their respective governing bodies, by joint agreement have adopted the following amendment to the Articles of Incorporation of the Montgomery Regional Solid Waste Authority **(the "Articles of Incorporation")**, pursuant to the Virginia Water and Waste Authorities Act:

1. The Articles of Incorporation are amended by deleting Section 4 in its current form and substituting the following as Section 4 of the Articles of Incorporation:

   The terms of office of the five (5) members of the Board of the Authority beginning July 1, 2018 shall be as follows: the member representing Montgomery County shall have a term of three (3) years, the member representing Town of Blacksburg shall have a term of two (2) years, the member representing Town of Christiansburg shall have a term of one (1) year, the member representing Virginia Polytechnic Institute and State University shall have a term of four (4) years and the at-large member shall have a term of two (2) years. Subsequent to these terms, each member shall be appointed for terms of four (4) years each, and members may be reappointed to succeed themselves. Members representing the respective incorporating political subdivision shall be appointed by their respective governing bodies and the at-large member shall be appointed jointly by all governing bodies, each such successive member so appointed to represent his or her respective incorporating political subdivision or at large, as appropriate, until the expiration of such member's term, and until such member's successor shall have been duly appointed. Any vacancy in the membership of the Authority other than by expiration of term shall be filed by the respective governing body (or as to the at-large member, by all of the governing bodies, jointly) by the appointment of a member to fill such vacancy for the unexpired term only.

IN WITNESS WHEREOF, the Board of Supervisors of Montgomery County, Virginia, by its County Administrator, the Town of Blacksburg, Virginia, by its Town Manager, the Town of Christiansburg, Virginia, by its Town Manager and Virginia Polytechnic Institute and State University, by its Executive Vice President have caused these Articles of Amendment to Articles of Incorporation to be executed, and their respective seals to be affixed hereto and attested by their respective clerks or secretaries this __ day of _____, 2018.

MONTGOMERY COUNTY, VIRGINIA

By:_____
County Administrator

ATTEST:

_____
Clerk

TOWN OF BLACKSBURG, VIRGINIA

By:_____
Town Manager

ATTEST:

_____
Clerk

TOWN OF CHRISTANSBURG, VIRGINIA

By:_____
Town Manager

ATTEST:

_____
Clerk

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

By:_____
Vice President for Operations

ATTEST:

_____
Secretary

RESOLUTION ON APPOINTMENTS TO THE MONTGOMERY REGIONAL SOLID WASTE AUTHORITY

The university is requesting approval for reappointments - one joint member and one university representative - to the Montgomery Regional Solid Waste Authority Board of Directors, as a result of changes to the Articles of Incorporation that provide for staggered terms of office.

RESOLUTION ON APPOINTMENTS TO THE MONTGOMERY REGIONAL SOLID WASTE AUTHORITY

WHEREAS, the Montgomery Regional Solid Waste Authority (the Authority) consists of five directors who are responsible for the management and operation of the Authority; and,

WHEREAS, one director is appointed by each of the four political subdivisions, and the other director is appointed jointly by all governing bodies; and,

WHEREAS, it is necessary to reappoint members of its Board of Directors in accordance with the amended Articles of Incorporation; and,

WHEREAS, Al Bowman currently serves as a joint representative; and,

WHEREAS, the local political subdivisions and Virginia Tech desire to reappoint Al Bowman, as the joint representative for a term of two years in accordance with the Authority's Articles of Incorporation, as amended; and,

WHEREAS, Chris Kiwus, the Chief Facilities Officer, currently serves as the university's representative; and,

WHEREAS, Virginia Tech desires to reappoint the Chief Facilities Officer, currently Chris Kiwus, as the university's representative for a term of four years in accordance with the Authority's Articles of Incorporation, as amended;

NOW, THEREFORE, BE IT RESOLVED, that Al Bowman be named as a joint representative and member on the Montgomery Regional Solid Waste Authority for a term beginning on July 1, 2018 and expiring June 30, 2020; and,

BE IT FURTHER RESOLVED, that the Chief Facilities Officer be named the university's representative and member on the Montgomery Regional Solid Waste Authority for a term beginning on July 1, 2018 and expiring June 30, 2022.

RECOMMENDATION:

That the resolution recommending that Al Bowman be reappointed as joint representative and the Chief Facilities Officer be reappointed as the university's representative to the Montgomery Regional Solid Waste Authority Board of Directors be approved.

June 4, 2018

Report on and Recommendation Regarding Quasi-Endowments

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

May 4, 2018

Background

The university has long had the authority to invest endowments, gifts, and other private funds in a wide array of financial securities. With the expanded authority to invest nongeneral funds provided in Section 23.1-2604 of the Code of Virginia, the university authority was expanded to include investment and management of endowment funds, endowment income, gifts, all other nongeneral fund reserves and balances, and local funds of or held by the university in accordance with this section and the provisions of the *Uniform Prudent Management of Institutional Funds Act* (§ 64.2-1100 et seq.). While the investments allowed under the expanded authority have the potential for higher returns, they also involve more risk.

While private gifts and endowments are normally received and invested by the Virginia Tech Foundation (Foundation), the focus of this report is on public university funds that, through the authority provided in Section 23.1-2604, are invested by the Foundation under an agency agreement. These investments are made in accordance with the provisions of the Virginia *Uniform Prudent Management of Institutional Funds Act* and the university's investment policy.

As of December 31, 2017, the market value of university funds invested in the endowment pool managed by the Foundation was $225.7 million. This includes John Lee Pratt's 1977 restricted gift of $11 million to support Animal Nutrition and the College of Engineering that has grown to $48.4 million as of December 31, 2017.

Investments are made for the purpose of generating higher investment income to advance university goals and objectives. Investment income currently supports university operations, initiatives, scholarships, and maintenance reserve programs while holding down student fees. Beginning in 2018-19, a portion of the investment income from unrestricted assets will support the university's share of costs for the Virginia Tech Carilion School of Medicine.

Investment horizon is based on the nature of the funding and strategic plans. University owned long-term investments held in the Foundation endowment investment pool can effectively function as a quasi-endowment, where the purchasing power of the principal over the long term is preserved.

Quasi-Endowment

True endowments are funds received from a donor with the restriction that the principal is not expendable. This allows for the gift to have an impact over a longer period than if it were spent all at once. Endowments may also come with stipulations regarding usage. As a result, an endowment payout may be restricted to a specific purpose such as a scholarship, professorship, or program. Two examples of true endowments, held by the university, are the Rolls Royce Endowments which were created by the Commonwealth as part of the incentive package to recruit the company to Virginia and the Pouring Rights Scholarship from Coca-Cola.

Quasi-endowments represent university funds designated by the Board of Visitors rather than a donor. They carry the same intent to provide ongoing income from a long-term investment; however, the governing board retains the authority to repurpose such funds and to remove funds from the quasi-endowment asset category at any time.

The university has completed a comprehensive review of its long-term investments and strategic plans. As a result of this review, the university recommends that the following funds should be designated and/or reaffirmed by the Board of Visitors as quasi-endowments.

Pratt Estate

The Pratt Estate gift was previously designated by the board as a quasi-endowment in the late 1970s. The university recommends the Board of Visitors reaffirm this fund as a quasi-endowment for its restricted purpose of Animal Nutrition and the College of Engineering. The endowment value as of December 31, 2017 was $48.4 million.

Donaldson Brown Scholarship

During the 1940s, the late Mr. Donaldson Brown made gifts to the university designated for the President's Student Loan Fund. Mr. Brown's stipulations for administration of the fund allowed use of the funds for student loans or scholarship. In 1992, the funds were redirected to provide scholarships. The endowment value as of December 31, 2017 was $0.9 million. Due to the age of the gift, prior board designations are uncertain; as a result, the university seeks for the Board of Visitors to designate this fund as a quasi-endowment for scholarships consistent with the terms of the gift.

Nationwide Scholarship

A 2014 settlement agreement with Nationwide Life Insurance Company related to student medical insurance premiums included the establishment of a scholarship fund in their name from any residual or unclaimed funds. The university has invested these funds to create ongoing income for scholarships. The value as of December 31, 2017 was $6.2 million, and additional funds in the range of $2 to $3 million may be available

for investment within the next year. The university seeks for the Board of Visitors to designate this fund and any future funds received as a quasi-endowment restricted for scholarships.

Student Health Insurance Fund

In 1997, the university received a stock conversion settlement from Trigon when the company went public. The university invested these funds to support the health care insurance program. The value as of December 31, 2017 was $0.4 million. The university recommends the Board of Visitors designate this fund as a quasi-endowment designated in support of the student health insurance program. This may include the administration of student insurance programs.

Gloria Smith Professorship

In August 2000, the university approved an allocation from the Athletic Department's Sugar Bowl proceeds to serve as a base that would provide ongoing support for the Gloria Smith professorship. The professorship, named in honor of the late Gloria D. Smith, a counselor and advocate of minority students on campus before her retirement, is awarded for a period of two years to an outstanding faculty member who contributes significantly to the growth and development of minority students, student athletes, and scholarly pursuits. The value as of December 31, 2017 was $0.4 million. The university recommends the Board of Visitors authorize this fund as a quasi-endowment designated for the professorship.

Multicultural Affairs Scholarship

In August 2000, the university approved an allocation from the Athletic Department's Sugar Bowl proceeds to serve as a base that would provide ongoing support for scholarships for Multicultural Affairs. These resources are held by the Foundation and generate annual payout that are available for scholarship expenditure. The value as of December 31, 2017 was $0.1 million. The university recommends the Board of Visitors authorize this fund as a quasi-endowment designated for scholarships.

Chinese Endowed Geosciences Scholarship

In 2002, the Department of Geological Sciences established a scholarship fund to support Chinese graduate students from funds provided by the People's Republic of China. The value as of December 31, 2017 was $0.1 million. The university recommends the Board of Visitors authorize this fund as a quasi-endowment designated for scholarships to support scholarships for Chinese graduate students studying Geosciences.

Licensing & Trademark Scholarship

Over the last two decades, the University's Licensing & Trademark agreements have created one-time resources that have been invested to create ongoing income for scholarships. The value as of December 31, 2017 was $13.0 million. The university requests the Board of Visitors to designate this fund as a quasi-endowment for scholarships.

Management of Quasi-Endowments

The university has or will transfer these funds to the Virginia Tech Foundation to be invested in accordance with the university's agreement with the Foundation regarding the management of all such university funds.

The investment of university resources and designation as a quasi-endowment creates an ongoing revenue stream for the university. The university's Chief Financial Officer is responsible for the periodic monitoring of these quasi-endowments and for the deployment of the quasi-endowment payouts in the university's budget process to achieve the intended objectives of the quasi-endowment.

RECOMMENDATION:

That the funds listed on Attachment A be reaffirmed and/or designated as quasi-endowments.

June 4, 2018

Attachment A

University Funds Recommended for Quasi-Endowment Reaffirmation and/or Designation

Fund Title	Source of Funding	Use of Funds	Fund Purpose	Market Value*
Reaffirm				
Pratt Fund	Estate of John L. Pratt	Restricted	Animal Nutrition & Engineering	$48.4M
Designate				
Donaldson Brown	Donaldson Brown Gift	Restricted	Scholarships	$0.9M
Nationwide	Medical Insurance Settlement from Nationwide	Restricted	Scholarships	$6.2M
Student Health Insurance	Trigon Stock Conversion Settlement	Unrestricted	Student Health Insurance	$0.4M
Gloria Smith Professorship	Athletics Sugar Bowl Proceeds	Unrestricted	Professorship	$0.4M
Multicultural Affairs	Athletics Sugar Bowl Proceeds	Unrestricted	Scholarships	$0.1M
Chinese Geosciences	People's Republic of China	Unrestricted	Scholarships	$0.1M
Licensing and Trademark	University Licensing & Trademark Agreements	Unrestricted	Scholarships	$13.0M

* As of December 31, 2017

Report on and Recommendation Regarding Quasi-Endowments

June 4, 2018

DWIGHT SHELTON

INTERIM SENIOR VICE PRESIDENT FOR OPERATIONS AND ADMINISTRATION, VICE PRESIDENT FOR FINANCE AND CFO

VIRGINIA TECH™

Endowment Types

- True Endowments
  - Created by donors
  - Investment income may be used, but the principal may not be spent
    - Received by the Virginia Tech Foundation directly
    - Could come to the university
      - Example: Rolls Royce and Coca-Cola Pouring Rights Endowment
- Quasi-Endowments
  - University funds designated by the board to function like an endowment
    - Purchasing power of the principal over the long term is preserved
  - Board has authority to repurpose the funds and to remove resources from the quasi-endowment at any time

Virginia Tech Foundation Investment Pool

FY 2017 Market Value of $995.8 million

- The Virginia Tech Foundation receives and invests private funds and endowments given for the support of programs at Virginia Tech

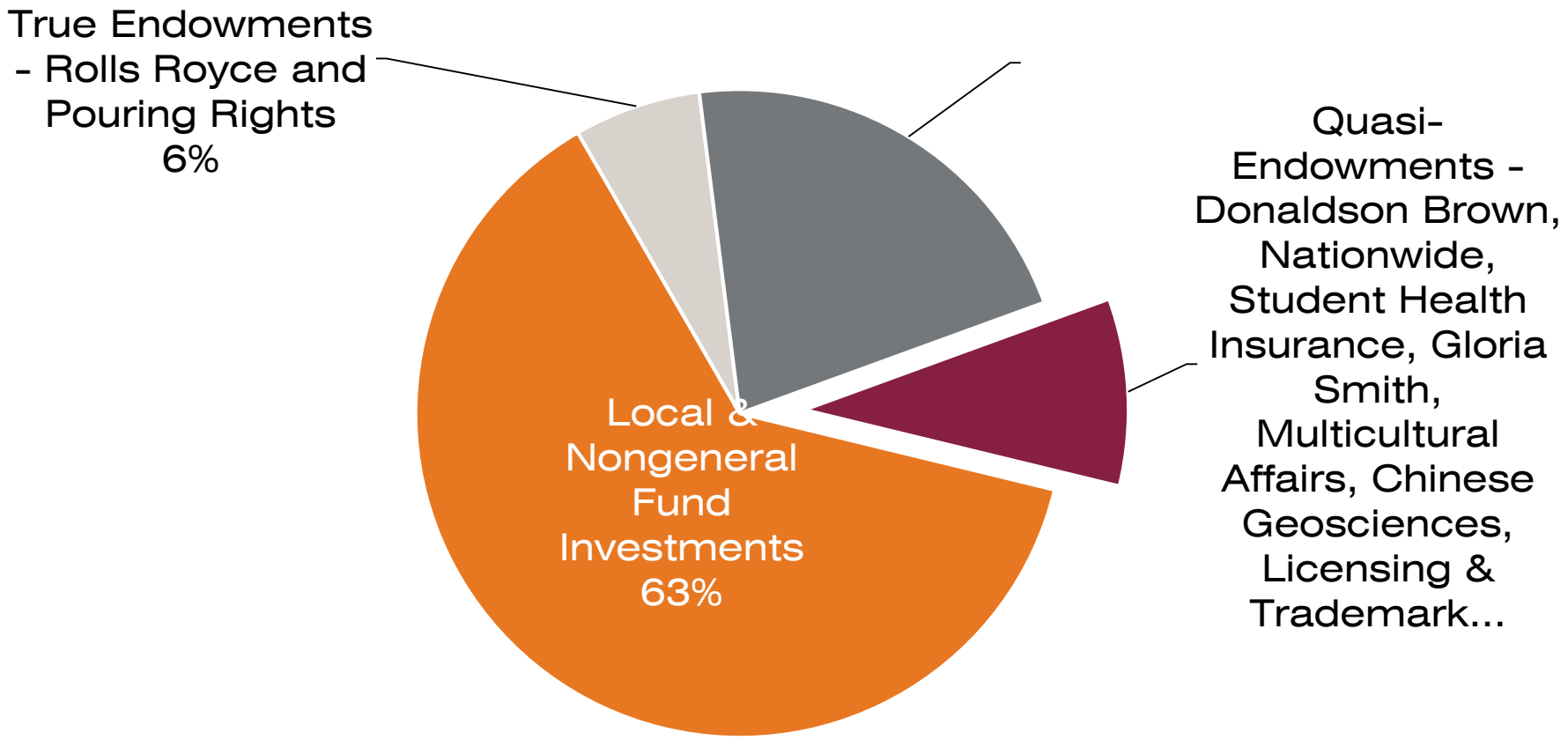
- VTF also invests university funds in accordance with an agency agreement with the university

University Investments

- §23.1-2604 of the Code of Virginia provides the authority to invest and manage the endowment funds, endowment income, gifts, all other nongeneral fund reserves and balances, and local funds held by the university
- Investment and management of these funds
  - While there is market risk, the objective is for higher investment income to advance university goals and objectives
  - Supports university operations, initiatives, scholarships, and maintenance reserve projects while holding down student fees
    - Beginning in 2018-19, a portion of the investment income derived from unrestricted assets will support the university's share of costs for Virginia Tech Carilion School of Medicine

University Long-Term Investments

$225.7 Million Market Value
As of December 31, 2017



Listing of Quasi-Endowments Owned by the University

Funds Previously Designated by the Board as Quasi-Endowment:

Pratt Fund	Restricted	Animal Nutrition and Engineering	$48.4M

Funds Recommended as Board Designated Quasi-Endowments:

Donaldson Brown	Restricted	Scholarships	$0.9M
Nationwide	Restricted	Scholarships	$6.2M
Student Health Insurance	Unrestricted	Student Health Insurance	$0.4M
Gloria Smith Professorship	Unrestricted	Professorship	$0.4M
Multicultural Affairs	Unrestricted	Scholarships	$0.1M
Chinese Geosciences	Unrestricted	Scholarships	$0.1M
Licensing and Trademark	Unrestricted	Scholarships	$13.0M
		Total Recommended Quasi-Endowments	**$69.5 M**

** Market Values as of December 31, 2017*

Management of Quasi-Endowments

- The University has or will transfer these funds to the Virginia Tech Foundation to be invested in accordance with the university's agreement with the Foundation regarding the management of all such university funds.
- Quasi-endowments create an ongoing revenue stream for the university to advance strategic goals and objectives while holding down tuition and fees.
- The university's Chief Financial Officer is responsible for the periodic monitoring of these quasi-endowments and for the deployment of the quasi-endowment payments in the university budget process to achieve the intended objective(s) of the quasi-endowment.

RECOMMENDATION:

That the aforementioned funds be reaffirmed and/or designated as quasi-endowments.

June 4, 2018

Resolution on University Lines of Credit

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

May 5, 2018

Consistent with the trend at many major research institutions, the university has developed, and is in the process of implementing, an updated cash management strategy to leverage limited resources. This is accomplished through the investing of additional university operating reserves in the Virginia Tech Foundation's (Foundation) endowment program. While this should result in achieving enhanced investment returns over time, it will also result in maintaining a reduced amount of operating reserves. A representative workgroup comprising of personnel from the Budget Office, Controller's Office, and Investment and Debt Management identified the appropriate level of cash reserves to invest and concluded that a back-up operating line of credit would be needed to completely implement the new investment strategy. A line of credit is a common cash management tool utilized in many corporate operations. The workgroup examined the current and projected cash flows and determined that $185 million of external liquidity would be needed, based on the university's FY 2018 annual budget. The plan results in the generation of enhanced investment income that will help advance university strategic needs, while reducing the need for tuition and fee increases.

While the university believes that it will be able to operate throughout the year with its planned internal reserves, it recognizes the possibility that a major demand on cash could occur unexpectedly and rapidly. If such an event did occur, this line of credit will provide time for the university to access its longer-termed investments at the Foundation. Once the cash management strategy is fully implemented, the annual low point of the university's seasonal cash flow cycles is anticipated to be approximately $185 million, which equates to roughly 45 days of highly liquid operating reserves. Management determined that it would be in its best interest to target approximately 90 days of reserve liquidity through a combination of internal operating reserves and two or more external bank lines of credit. Accordingly, three bank line of credit providers have been identified to provide loans for up to $200 million of liquidity in aggregate, which should provide enough flexibility to obtain approximately 45 days of liquidity based in the university's estimated FY 2019 budget. The external liquidity, when combined with the university's operating reserves, will provide approximately 90 days of highly liquid cash reserves.

Board approval is needed for the establishment and access to the lines of credit. Upon approval of the lines of credit, the university will be authorized to draw upon the lines of credit, as needed. The lines will be (a) revolving lines of credit, the principal amount of which may be borrowed, repaid, and re-borrowed, and (b) secured by the university's

general revenue pledge, and not considered debt of the Commonwealth of Virginia, either legal, moral, or otherwise. McGuireWoods serves as university bond counsel.

Under the terms of the resolution, the university will enter into one or more credit agreements that set forth the terms and conditions of the applicable line of credit, in substantially the form provided to the Board. The Board's approval will (a) authorize the lines of credit for an aggregate amount of up to $200 million, (b) approve the terms of the bank proposals and the form of the credit agreement, which includes a form promissory note, (c) identify the President, Chief Financial Officer, and University Treasurer as authorized officers to negotiate, execute and deliver all necessary documents related to the credit lines, and (d) authorize the authorized officers to enter into extensions of and amendments to the lines of credit and new lines of credit with other financial institutions from time to time, so long as such extensions and amendments and new lines of credit are not inconsistent with the intent of this resolution and the aggregate principal amount of the lines of credit does not exceed the greater of $200 million or 45 days of university operating expenditures based on the then Board-approved operating budget.

The university will review its liquidity profile at least annually to determine if its liquidity target and/or bank allocations require rebalancing.

Resolution on University Lines of Credit

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

May 5, 2018

WHEREAS, Chapter 26, Title 23.1 of the Code of Virginia of 1950, as amended (the "Virginia Code"), establishes a public corporation under the name and style of Virginia Polytechnic Institute and State University (the "University") which is governed by a Board of Visitors (the "Board"); and

WHEREAS, by Chapter 10, Title 23.1 of the Virginia Code (the "Act"), the University entered into a management agreement with the Commonwealth of Virginia, which was enacted as Chapter 1 of Chapter 933 of the 2006 Virginia Acts of Assembly, as amended, pursuant to which the University is (a) classified as a public institution of higher education and (b) granted the authority, pursuant to the Act, to issue bonds, notes, or other obligations that are consistent with debt capacity and management policies and guidelines established by the Board and without (i) obtaining the consent of any legislative body, elected official, commission, board, bureau, political subdivision, or agency of the Commonwealth, (ii) the approval required by the provisions of Article 8 of Chapter 24 of Title 2.2 of the Virginia Code, or (iii) any regulation or procedure, including a review or approval procedure, adopted pursuant to Chapter 11 of Title 23.1 of the Virginia Code; and

WHEREAS, the Act further authorizes the University to provide for the payment of the principal of and the interest on such bonds, notes, or other obligations from any one or more of the following sources: (a) its revenues generally; (b) income and revenues derived from the operation, sale, or lease of a particular project or projects, whether or not they are financed or refinanced from the proceeds of such bonds, notes, or other obligations; (c) funds realized from the enforcement of security interests or other liens or obligations securing such bonds, notes, or other obligations; (d) proceeds from the sale of bonds, notes, or other obligations; (e) payments under letters of credit, policies of municipal bond insurance, guarantees, or other credit enhancements; (f) any reserve or sinking funds created to secure such payment; (g) accounts receivable of the University; or (h) other available funds of the University; and

WHEREAS, the University has determined that it would be in the best interest of the University to enter into one or more lines of credit (the "Lines of Credit") as a source of liquidity to support the general operations of the University; and

WHEREAS, it is anticipated that the Lines of Credit will (a) be revolving lines of credit, the principal amount of which may be borrowed, repaid, and re-borrowed and (b) be secured by the University's general revenue pledge and not be in any way a debt of the Commonwealth of Virginia (the "Commonwealth") and shall not create or constitute any indebtedness or obligation of the Commonwealth, either legal, moral, or otherwise; and

WHEREAS, the University has solicited proposals from various financial institutions to provide the Lines of Credit, including proposals from Branch Banking and Trust Company, The First Bank and Trust Company, and Wells Fargo Bank, National Association (collectively, the "Proposals"), the terms of which Proposals were presented to the Board; and

WHEREAS, under the terms of the Proposals, the University will enter into one or more credit agreements or similar agreements that set forth the terms and conditions of the applicable Line of Credit, in substantially the form presented to the Board (each a "Credit Agreement"); and

WHEREAS, to evidence its obligations under a Credit Agreement, the University will execute a promissory note in favor of the applicable financial institution, in substantially the form attached as an exhibit to the applicable Credit Agreement (each a "Note"); and

WHEREAS, the Board intends (a) to authorize the Lines of Credit, (b) approve the terms of the Proposals, the form of the Credit Agreement, which includes a form of the Note, and (c) take such other actions as are authorized in this Resolution.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF VISITORS OF VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY:

1. Authorization of Credit. For the purpose of providing a source of back-up liquidity to support the general operations of the University, the Board authorizes the Lines of Credit in an aggregate principal amount of up to $200,000,000. The Lines of Credit shall bear interest on a taxable basis, and the payment of principal of and interest on the Lines of Credit shall be from one or more of the sources authorized by the Act, all as more particularly described in the applicable Proposal and Credit Agreement. The Board hereby approves the terms of the Proposals, the form of the Credit Agreement and the form of the Note.

2. Delegation and Execution. The Board authorizes the President of the University, the Chief Financial Officer of the University, or the University Treasurer (collectively, the "Authorized Officers") to negotiate, execute, and deliver all certificates, documents, and instruments related to the Lines of Credit with one or more financial institutions; provided that the initial closing of all such Lines of Credit must occur on or before January 31, 2019. The final approval of the terms and conditions of the Lines of Credit and the final selection of the financial institutions shall be evidenced by the execution and delivery of the Credit Agreements by one or more Authorized Officers. The Board authorizes all University officers and staff to take such other actions as may be necessary or desirable in connection with entering into and maintaining the Lines of Credit. The Board authorizes the Authorized Officers to enter into extensions of and amendments to the Lines of Credit and new Lines of Credit with other financial institutions from time to time (including to increase the aggregate principal amount thereof), so long as such extensions and amendments and new Lines of Credit are not inconsistent with the intent of this Resolution and the aggregate principal amount of the Lines of Credit does not exceed the greater of

(1) the amount authorized in paragraph (1) and (2) 45 days of operating expenditures of the University, based on the then Board-approved operating budget.

3. Other Acts. All other acts of the Authorized Officers and other officers and staff of the University that are in conformity with the purpose and intent of this Resolution are hereby approved, ratified and confirmed.

4. Not a Debt of the Commonwealth. The Lines of Credit shall not be in any way a debt of the Commonwealth and shall not create or constitute any indebtedness or obligation of the Commonwealth, either legal, moral, or otherwise.

5. Effective Date. This Resolution shall take effect immediately upon adoption.

RECOMMENDATION:

That the resolution identifying the authorized officers; approving the terms of the proposals and the form of the credit agreement; authorizing the authorized officers to enter into extensions of, and amendments to, the lines of credit and new lines of credit so long as such extensions and amendments and new lines of credit are consistent with the intent of this resolution and do not exceed the greater of $200 million or 45 days of operating expenditures, be approved.

June 4, 2018

LINES OF CREDIT -PROPOSALS

Attachment AA

Bank Name:	Wells Fargo
Term:	1, 2 or 3
Facility Amount:	Up to $75M
Undrawn Fee:	
1 year term	13 basis points
2 year term	14 basis points
3 year term	15 basis points
Interest Rate (spread in basis points to 1-month LIBOR):	
1 year term	24 basis points
2 year term	30 basis points
3 year term	32 basis points
Term-Out Period:	Three years
Terms:	Six months interest only and a 2.5 year term loan
Rates:	1. Base Rate for 6 month interest only is the greater of: - The Bank's prime rate plus 1%, - The Federal Funds rate plus 2.0%, or - 7% 2. Amortized 2.5 year term loan rate: - Base Rate plus 1.00% 3. Default Rate: - Base Rate plus 3.00%

Bank Name:	BB&T
Term:	1, 2 or 3
Facility Amount:	Up to $95M
Undrawn Fee:	
1 year term	7.5 basis points
2 year term	7.5 basis points
3 year term	7.5 basis points
Interest Rate (spread in basis points to 1-month LIBOR):	
1 year term	45 basis points
2 year term	45 basis points
3 year term	45 basis points
Term-Out Period:	Three years
Terms:	Six months interest only and a 2.5 year term loan
Rates:	1. Base Rate for 6 month interest only is the greater of: - The Bank's prime rate plus 1%, - The Federal Funds rate plus 2.0%, or - 7% 2. Amortized 2.5 year term loan rate: - Base Rate plus 1.00% 3. Default Rate: - Base Rate plus 3.00%

Bank Name:	The First Bank & Trust Company
Term:	1, 2, 3 or 4
Facility Amount:	Up to $30M
Undrawn Fee:	
1 year term	None
2 year term	None
3 year term	None
4 year term	None
Interest Rate (spread in basis points to 1-month LIBOR):	
1 year term	225 basis points
2 year term	225 basis points
3 year term	225 basis points
4 year term	225 basis points
Term-Out Period:	None

REVOLVING CREDIT AGREEMENT

Dated as of _____, 2018

By and Between

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

and

[LENDER NAME]

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REVOLVING CREDIT AGREEMENT

THIS REVOLVING CREDIT AGREEMENT (this "Agreement") is dated as of _____, 2018, by and between VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, an educational institution established by the Commonwealth of Virginia as a public body and governmental instrumentality for the dissemination of education (the "University"), and [LENDER NAME], a national banking association (together with its successors or assigns the "Bank").

WHEREAS, the University has applied to the Bank for a revolving line of credit in the maximum principal amount of $_____ (as more particularly described herein, the "Facility"), advances under which will be used by the University for working capital, for general corporate and operating purposes, and for any other lawful purpose; and

WHEREAS, the University and the Bank intend that the Facility will be governed by the terms and subject to the conditions contained herein.

NOW, THEREFORE, in consideration of the covenants herein, the University and the Bank hereby agree as follows:

ARTICLE I
DEFINITIONS

Section 1.1. Definitions.

In addition to terms defined above or elsewhere in this Agreement, the following terms shall have the following meanings unless otherwise expressly indicated, or unless the context clearly requires otherwise:

"Act" means Chapter 10, Title 23.1 of the Code of Virginia of 1950, as amended.

"Advance" means an advance under the Facility made pursuant to the terms of Section 2.2, and shall include the Liquidity Draw made pursuant to the terms of Section 2.5(b).

"Advance Date" means any date on which the Bank makes an Advance as described in Section 2.3.

"Applicable Interest Rate" means (a) with respect to each Advance (other than the Liquidity Draw), a per annum rate equal to LIBOR plus the Applicable Margin, with such rate to change (i) on the first day of each LIBOR Period with each change in LIBOR, and (ii) with each change in the Applicable Margin, and (b) with respect to the Liquidity Draw, the Liquidity Rate.

"Applicable Margin" means, initially, _____ basis points per annum.

"Authorized Officer" means the University Treasurer, the Assistant Treasurer, the Assistant Vice President for Finance and University Controller, or any functionally equivalent successor position to any of the aforementioned University positions but which bears a different title, or any other person authorized by resolution of the University to act as an Authorized Officer hereunder and for which a written certificate has been furnished to the Bank containing the specimen signature of such person.

"Available Commitment" means initially $_____, and thereafter shall mean such amount adjusted from time to time as follows: (i) downward by the amount of any reduction of the Available Commitment pursuant to Section 3.4; (ii) downward by the principal amount of any Advance made by the Bank pursuant to Section 2.2; and (iii) upward by the principal amount of any Advance repaid to the Bank pursuant to Section 2.5; provided, that in no event shall the Available Commitment exceed $_____. Any adjustment pursuant to clause (i), (ii) or (iii) above shall occur simultaneously with the event requiring such adjustment.

"Bond Ratings" means the long-term credit ratings assigned from time to time to the University's unenhanced General Revenue Obligations by each of the Rating Agencies. The Bond Ratings will change as of the date of any change in such long-term credit ratings.

"Business Day" means any day other than a Saturday, Sunday or a day on which banking institutions in the Commonwealth or the State of New York are closed.

"Claw Back Amount" means, for any period during which a payment obligation hereunder or under the Note bears interest at a rate in excess of the Maximum Rate, an amount equal to the difference between the amount of interest the Bank would have received hereunder or under the Note during such period, without regard to the limitations imposed by the Maximum Rate, and the amount of interest actually payable to the Bank at the Maximum Rate during such period.

"Commitment Period" means the period from and including the Effective Date to and including the Expiration Date.

"Commonwealth" means the Commonwealth of Virginia.

"Debt" means, with respect to any Person, without duplication, (i) all general obligations of such Person for borrowed money and reimbursement general obligations which are not contingent, (ii) all general obligations of such Person evidenced by bonds, debentures, notes or other similar instruments, (iii) all obligations of such Person to pay the deferred purchase price of property or services which purchase price is due twelve months or more from the date of incurrence of the obligation in respect thereof, (iv) all obligations of such Person as lessee under capital leases, (v) all payment obligations of such Person, in addition to any obligations set forth in clauses (i) through (iv) above, arising under any interest rate swap agreement, interest rate cap agreement, interest rate collar agreement, interest rate futures contract, interest rate option contract or other similar arrangement and under any foreign exchange contract, currency swap agreement,

foreign exchange futures contract, foreign exchange option contract, synthetic cap or other similar agreement, and (vi) all payment obligations set forth in clauses (i) through (v) above of any third party which are Guaranteed by such Person; provided, however, that the term "Debt" shall not include contingent obligations of any Person to reimburse the provider of any surety bonds or letters of credit to the extent that such surety bonds or letters of credit support obligations of such Person that would otherwise be included in the term "Debt" under clauses (i) through (v) above.

"Debt Instrument" and "Debt Instruments" have the meanings assigned to such terms in Section 5.1(d).

"Default" means any event or condition which constitutes an Event of Default or which with the giving of notice or the lapse of time, or both, would, unless cured or waived, become an Event of Default.

"Default Rate" means a per annum rate equal to the rate of interest otherwise applicable to Advances hereunder plus _____ basis points.

"Dollars" or the sign "$" means dollars in the lawful currency of the United States of America.

"Effective Date" has the meaning set forth in Section 4.1.

"Event of Default" has the meaning set forth in Section 7.1.

"Expiration Date" means the earliest to occur of (i) the Scheduled Expiration Date, (ii) the date on which the University terminates this Agreement pursuant to Section 3.4(b), and (iii) the date on which the Bank terminates its obligation to make Advances under the Facility pursuant to Section 7.2(a).

"Facility" means the obligation of the Bank to make Advances which in the aggregate at any one time will not exceed the Available Commitment.

"Fee Letter" means the Fee Letter dated of even date herewith between the Bank and the University regarding the payment of certain fees in connection with the Facility, as the same may be amended, restated, replaced or otherwise modified from time to time.

"Fitch" means Fitch, Inc. and its successors.

"GAAP" means generally accepted accounting principles applicable to governmental colleges and universities, as promulgated by the Governmental Accounting Standards Board from time to time.

"General Revenue Obligations" means Debt of the University to which the General Revenues of the University are pledged.

"General Revenues" has the meaning set forth in Section 3.6.

"Guarantee" means, with respect to any Person, any obligation, contingent or otherwise, of such Person directly or indirectly guaranteeing any Debt of any other Person and, without limiting the generality of the foregoing, any obligation, direct or indirect, contingent or otherwise, of such Person (i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Debt (whether arising by virtue of partnership arrangements, by agreement to keep-well, to purchase assets, goods, securities or services, to take-or-pay, or to maintain financial statement conditions or otherwise), (ii) entered into for the purpose of assuring in any other manner the obligee of such Debt of the payment thereof or to protect such obligee against loss in respect thereof (in whole or in part) or (iii) with respect to any letter of credit issued for the account of such other Person or as to which such other Person is otherwise liable for reimbursement of drawings; provided, that the term "Guarantee" shall not include (1) endorsements for collection or deposit in the ordinary course of business, or (2) performance or completion guarantees. The term "Guarantee" used as a verb has a corresponding meaning.

"LIBOR" means [Lender specific definition to be included].

"LIBOR Period" [Lender specific definition to be included].

"Lien" means, with respect to any asset, (i) any lien, charge, claim, mortgage, security interest, pledge or assignment of revenues of any kind in respect of such asset or (ii) the interest of a vendor or lessor under any conditional sale agreement, capital lease or other title retention agreement relating to such asset.

"Liquidity Draw" has the meaning given to it in Section 2.5(b).

"Liquidity Rate" means [Lender specific definition to be included].

"London Business Day" means any day that is a day for trading by and between banks in Dollar deposits in the London interbank market.

"Material Adverse Effect" means any material adverse effect on (i) the properties, assets, condition (financial or otherwise), results of operations or prospects of the University taken as a whole, or (ii) the ability of the University to perform its obligations under this Agreement or the Note.

"Maximum Rate" means the maximum rate of interest payable by the University on any repayment obligation pursuant to the laws of the Commonwealth.

"Moody's" means Moody's Investors Service, Inc. and its successors.

"Note" means the promissory note of the University issued pursuant to this Agreement, substantially in the form of Exhibit A hereto, which evidences the obligation of the University to repay Advances made under the Facility, as the same may be amended, restated, replaced or otherwise modified from time to time.

"Participant" means any bank or other financial institution to which the Bank has granted a participation in the Bank's commitment to make Advances, pursuant to a Participation Agreement; provided, however, any such Participant shall take such participation subject to the terms of this Agreement.

"Participation Agreement" means any Participation Agreement between the Bank and a Participant, as described in accordance with Section 8.5 of this Agreement.

"Patriot Act" means the Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Title III of Pub. L. 107 56 (signed into law October 26, 2001), as amended, or any successor statute.

"Person" means an individual, a corporation, a partnership, a limited liability company, an association, a trust, a government, a political subdivision, a governmental agency or instrumentality or any other entity or organization.

"Rating Agencies" means, collectively, Moody's, S&P and Fitch.

"Request for Advance" means a written request for an Advance in substantially the form of Exhibit B.

"Sanctions" has the meaning set forth in Section 5.1(m).

"Scheduled Expiration Date" means _____, 20__, as such date may be extended pursuant to Section 3.5.

"S&P" means S&P Global Ratings and its successors.

"Taxes" has the meaning set forth in Section 3.3.

Section 1.2. Accounting Terms and Determinations.

Unless otherwise specified herein, all accounting terms used herein shall be interpreted, all accounting determinations hereunder shall be made, and all financial statements required to be delivered hereunder shall be prepared, in accordance with GAAP as in effect from time to time, applied on a basis consistent (except for changes approved by the Auditor of Public Accounts of the Commonwealth) with the most recent financial statements of the University delivered to the Bank.

Section 1.3. Rules of Construction.

When used in this Agreement:

(i) the singular includes the plural and the plural includes the singular;

(ii) the use of the word "or" is not exclusive;

(iii) a reference to a law includes any amendment or modification of such law;

(iv) a reference to a person includes its permitted successors and permitted assigns;

(v) a reference to an agreement, instrument or document shall include such agreement, instrument or document as the same may have been and may from time to time be amended, modified or supplemented in accordance with its terms and as permitted hereby;

(vi) a reference to an Article, Section, paragraph or Exhibit shall mean a reference to an Article, Section or paragraph hereof or Exhibit hereto, unless the context expressly requires otherwise; and

(vii) a reference to "herein" or "hereof" shall mean in or of this Agreement.

ARTICLE II
THE FACILITY

Section 2.1. General.

Upon the terms and subject to the conditions of this Agreement, the Bank agrees to make the Facility available to the University during the Commitment Period.

Section 2.2. Advances by the Bank.

The Bank agrees to make one or more advances (each an "Advance") to the University on any Business Day during the Commitment Period; provided, however, that the principal amount to be advanced at any time does not exceed the Available Commitment at such time. Within the limits specified above, the University may request Advances, repay Advances and request further Advances under the Facility. Subject to Section 2.5(b), each Advance shall be due and payable in full on the Expiration Date.

Section 2.3. Procedure for Requesting Advances.

The University shall give written notice (in the form of a Request for Advance), which may be delivered by facsimile, and telephonic notice to the Bank not later than 11:00 a.m. (New York, New York time) on the proposed date an Advance is to be made (each such date, an "Advance Date"), specifying the principal amount of the proposed Advance and the proposed Advance Date. Upon receipt of a timely Request for Advance by the Bank from the University, the Bank, subject to the terms and conditions of Section 4.2, shall advance to the University or its designee by 3:00 p.m. (New York, New York time) on the Advance Date the amount requested in such Request for Advance, which amount shall not exceed the Available Commitment on such date, after taking into consideration (a) any reduction in the Available Commitment, including any other Advances by the Bank on such Advance Date and (b) any increase in the Available Commitment as a result of any payments of principal made by the University on such Advance Date. Advances may be in any amount. With respect to any Request for Advance received by the Bank after the time required by this Section 2.3, the Bank shall be required to make such Advance by 2:00 p.m. (New York, New York time) on the

Business Day following the Business Day on which the Bank would otherwise be required to make such Advance had such Request for Advance been timely presented. An Authorized Officer of the University shall sign each Request for Advance. Each Advance shall be made by the Bank by wire transfer of immediately available funds to the University or its designee in accordance with written instructions provided by the University.

Section 2.4. Interest on Advances.

(a) Except following the occurrence of an Event of Default hereunder, each Advance shall bear interest at the Applicable Interest Rate. Interest on each Advance shall be due and payable [monthly / quarterly] in arrears on the first (1st) Business Day of each [month / _____ 1, _____ 1, _____ 1, and _____ 1], and upon the maturity of such Advance in accordance with Section 2.2 above, in each case calculated on the basis of the actual number of days elapsed over a year of [360 / 365 or 366] days[, as applicable].

(b) After the occurrence of an Event of Default, all Advances shall bear interest at the Default Rate unless the Bank shall agree otherwise in writing.

(c) In addition to the foregoing, for any period during which any obligation hereunder or under the Note bears interest at a rate in excess of the Maximum Rate, and if, for any subsequent period, the Applicable Interest Rate or the Default Rate, as applicable, is less than the Maximum Rate, the interest payable for such subsequent period on said obligation remaining unpaid shall be increased by the Claw Back Amount, but only to the extent that the interest payable on said obligation remaining unpaid, taking into consideration the Claw Back Amount, would not for such subsequent period exceed the Maximum Rate. The Claw Back Amount which accrues to the extent the Applicable Interest Rate or the Default Rate, as applicable, exceeds the Maximum Rate shall bear interest at the Applicable Interest Rate plus _____ basis points per annum. Any Claw Back Amount not paid in full to the Bank on or prior to the Expiration Date shall, on said Expiration Date but subject to applicable law, become due and payable on such Expiration Date as an additional fee.

Section 2.5. Optional Prepayments.

(a) The University may prepay any Advance in whole or in part, without premium or penalty except as provided below, provided that on the date of each such prepayment, the University shall pay to the Bank the principal amount of the Advance or portion thereof to be prepaid, plus accrued interest thereon to the date of prepayment. In consideration of the Bank providing this prepayment option to the Borrower, or if any Advance shall become due and payable at any time prior to the last day of the LIBOR Period applicable thereto by acceleration or otherwise, the Borrower shall pay to the Bank immediately upon demand a fee which is the sum of the discounted monthly differences for each month from the month of prepayment through the month in which such LIBOR Period matures, calculated as follows for each such month:

(i) Determine the amount of interest which would have accrued on the amount prepaid at the interest rate applicable to such amount had it remained outstanding until the last day of the LIBOR Period applicable thereto.

(ii) Subtract from the amount determined in paragraph (i) above the amount of interest which would have accrued for the same month on the amount prepaid for the remaining term of such LIBOR Period at LIBOR in effect on the date of prepayment for new loans made for such term and in a principal amount equal to the amount prepaid.

(iii) If the result obtained in paragraph (ii) above for any month is greater than zero, discount that difference by LIBOR used in paragraph (ii) above.

The University acknowledges that prepayment of such amount may result in the Bank incurring additional costs, expenses and/or liabilities, and that it is difficult to ascertain the full extent of such costs, expenses and/or liabilities. The University, therefore, agrees to pay the above-described prepayment fee and agrees that said amount represents a reasonable estimate of the prepayment costs, expenses and/or liabilities of the Bank.

(b) On the Expiration Date, if no Event of Default has occurred and is continuing, and if all representations and warranties of the University hereunder are true and correct, the aggregate principal balance of all Advances outstanding under this Agreement shall be repaid with a final Advance referred to as the "Liquidity Draw." Interest on the Liquidity Draw shall continue as provided in Section 2.4. The principal portion of the Liquidity Draw shall be payable on or before the 180th day following the Expiration Date, except as provided in the following sentence. On the 180th day following the Expiration Date, if no Event of Default has occurred and is continuing, and all representations and warranties of the University hereunder are true and correct, any outstanding principal portion of the Liquidity Draw will be repaid semi-annually, in six equal payments, commencing 180 days after the Expiration Date, in an amount sufficient to fully-amortize such outstanding amount over a period of 36 months from the Expiration Date. The unpaid balance of any Liquidity Draw shall be due and payable in full on the third anniversary of the Expiration Date.

Section 2.6. The Note.

The University's obligation to repay outstanding Advances hereunder (and interest in connection therewith) shall be evidenced by the Note. The Note shall (i) be duly completed and payable to the Bank or its assigns, (ii) be dated the Effective Date (or such other date as may be agreed upon between the Bank and the University), (iii) be in a stated principal amount equal to the amount of the initial Available Commitment, and (iv) mature on the Expiration Date. The Bank is hereby authorized by the University to endorse on the Note (or on any schedule attached thereto, or on a continuation of such schedule attached thereto) or otherwise make in the Bank's records an appropriate notation of the date and amount of each Advance and each payment of principal made by the University. Such endorsements or other notations shall, in the absence of manifest

error, be conclusive as to the outstanding principal balance of the Note; provided, however, that any error in making or failure to make any such endorsement or notation shall not limit or otherwise affect the obligations of the University hereunder or under the Note.

Section 2.7. Obligations Absolute.

(a) The obligations of the University under this Agreement and the Note shall be absolute, unconditional and irrevocable and shall be paid and performed strictly in accordance with the terms hereof and thereof, under all circumstances whatsoever, including, without limitation, the following circumstances:

(i) any lack of validity or enforceability of this Agreement or the Note;

(ii) any amendment or waiver of or any consent to departure from the terms of this Agreement or the Note, if not effected in accordance with Section 8.7 hereof;

(iii) the existence of any claim, setoff, defense or other right which the University may have at any time against the Bank or any other Person, whether in connection with this Agreement, the Note or any unrelated transaction;

(iv) any voluntary or involuntary liquidation, dissolution, receivership, insolvency, bankruptcy, proceeding for relief, assignment for benefit of creditors, reorganization, composition or readjustment of, or sale or other disposition of all or substantially all of the assets of, or the marshalling of the assets and liabilities of, or any proceeding for accounting of, the University;

(v) any statement or any other document presented pursuant hereto that proves to be forged, fraudulent, invalid or insufficient in any respect or untrue or inaccurate in any respect whatsoever;

(vi) payment by the Bank hereunder against presentation of a Request for Advance which does not comply with the terms of this Agreement; provided, that such payment shall not constitute gross negligence of the Bank; and

(vii) any other circumstance or happening whatsoever, whether or not similar to any of the foregoing; provided, that such other circumstance or happening shall not have been the result of gross negligence or willful misconduct of the Bank.

(b) Notwithstanding the foregoing, the Bank acknowledges the sovereign status of the University as a public body and governmental instrumentality of the Commonwealth.

ARTICLE III
TERMS

Section 3.1. Fees.

In consideration of the Bank's agreement to make the Facility available to the University hereunder, the University agrees to pay to the Bank the [undrawn / unused] fees (if any), and other fees as set forth in the Fee Letter. Any amounts due and payable under the Fee Letter shall be considered due and payable hereunder for all purposes of this Agreement as if the Fee Letter were set forth herein in full.

Section 3.2. Payment of Interest after Event of Default.

Upon the occurrence and during the continuance of any Event of Default, the Bank may from time to time demand from the University, and the University hereby agrees to pay upon such demand, accrued interest on any or all Advances outstanding at the time of the occurrence or continuance of such Event of Default.

Section 3.3. Taxes.

To the extent permitted by law, any and all payments by the University hereunder shall be made free and clear of and without deduction for any and all taxes, levies, imposts, deductions, charges or withholdings, and all liabilities with respect thereto, excluding taxes imposed on the overall net income of the Bank (and franchise taxes imposed in lieu of net income taxes) by the jurisdiction of the Bank's applicable lending office or any political subdivision thereof (all such non-excluded taxes, levies, imposts, deductions, charges, withholdings and liabilities being hereinafter referred to as "Taxes"). If the University shall be required by law to withhold or deduct any Taxes from or in respect of any sum payable hereunder then, to the extent permitted by law, (i) the sum payable shall be increased as may be necessary so that after making all required withholdings or deductions (including those Taxes payable solely by reason of additional sums payable under this Section 3.4), the Bank receives an amount equal to the sum it would have received had no such withholdings or deductions been made, (ii) the University shall make such withholdings or deductions, and (iii) the University shall pay the full amount withheld or deducted to the relevant taxation authority or other authority in accordance with applicable law.

Section 3.4. Reduction of Available Commitment; Termination of Agreement.

(a) The University may permanently reduce the amount of the Available Commitment, at any time and from time to time, in any integral multiple of $1,000,000, by delivering to the Bank a certificate in substantially the form of Exhibit C at least thirty (30) days' prior to the proposed effective date of such reduction. In connection with any such reduction, the University shall prepay any Advances outstanding under the Facility in excess of the proposed reduced Available Commitment, together with all interest accrued or to accrue through the date of prepayment.

(b) Subject to the payment to the Bank of all amounts due hereunder, including amounts due under Section 3.1 and Section 3.2, the University may terminate this Agreement at any time by delivering to the Bank a certificate in substantially the form of Exhibit C at least thirty (30) days prior to the proposed effective date of such termination.

Section 3.5. Extension of Scheduled Expiration Date.

The Scheduled Expiration Date may be extended by the Bank, in its sole and absolute discretion, upon the written request of the University in the form of Exhibit D given to the Bank at least ninety (90) days prior to the Scheduled Expiration Date. Within thirty (30) days of receipt of a request for extension, the Bank shall either notify the University that the Scheduled Expiration Date will be extended to the new Scheduled Expiration Date set forth in a notice in the form of Exhibit E to the University or notify the University that the Scheduled Expiration Date will not be so extended. Failure of the Bank to so respond to any such request shall constitute a denial of such request. Upon any extension of the Scheduled Expiration Date pursuant to this Section, the Bank and the University reserve the right to renegotiate any provision hereof.

Section 3.6. Payments and Computations.

(a) All payments by the University under this Agreement and the Note shall be made to the Bank in Dollars and in immediately available funds to the account designated by the Bank.

(b) All payments by the University under this Agreement and the Note shall be made to the Bank not later than 1:00 p.m., New York, New York time on the payment date. If any payment hereunder becomes due and payable on a day other than a Business Day, such payment shall be made on the next succeeding Business Day.

(c) All interest and fees payable hereunder and under the Note shall be calculated on the basis of the actual number of days elapsed or to elapse over a year of 360 days. Any change in the Applicable Interest Rate or the Default Rate shall become effective as of the opening of business on the day on which such change shall become effective.

(d) Whenever a payment is due to the Bank under this Agreement, the University shall be deemed to have made such payment at the time such payment is made available to the Bank.

Section 3.7. Source of Payment; Pledge of General Revenues.

The obligations of the University hereunder and under the Note are payable from any or all of the revenues now or hereafter available to the University, including, but not limited to, and subject to guidelines promulgated by the Secretary of Finance of the Commonwealth, moneys appropriated to the University from the general fund of the Commonwealth or from nongeneral funds, without regard to the source of such moneys, and which are not required by law or by binding contract entered into prior to the date of this Agreement to be devoted to some other purpose ("General Revenues"), which General Revenues are hereby pledged to the payment of all obligations of the University hereunder and under the Note on a parity basis with all other General Revenue Obligations.

Section 3.8. Purpose of Advances.

The proceeds of each Advance made under the Facility shall be used by the University for working capital, for general corporate and operating purposes, and for any other lawful purpose.

ARTICLE IV
CONDITIONS PRECEDENT

Section 4.1. Conditions Precedent to Effectiveness.

The Commitment Period shall commence on the date (the "Effective Date") on which each of the following conditions precedent shall have been fulfilled to the satisfaction of the Bank; provided, however, that the Effective Date shall occur no later than _____, 2018:

(a) The Bank shall have received an original counterpart of this Agreement and the original Note, each duly completed and executed by an Authorized Officer on behalf of the University.

(b) The Bank shall have received certified copies of all resolutions and other required approvals authorizing this Agreement and the transactions contemplated hereby (the "Authorizing Resolution").

(c) The Bank shall have received a certificate setting forth the names, titles and specimen signatures of all Authorized Officers expected to effect transactions hereunder, upon which certification the Bank may conclusively rely.

(d) If the Effective Date is later than the date of this Agreement, the Bank shall have received a certificate of the University to the effect that each of the representations and warranties contained in Article V shall, except to the extent that they relate specifically to an earlier date, be true with the same effect as though such representations and warranties had been made on the Effective Date.

(e) The Bank shall have received an opinion of the University's general counsel, dated the Effective Date, in form and substance satisfactory to the Bank and covering such matters as the Bank may reasonably request including, without limitation, the matters described in paragraphs (a) through (e) (other than clause (ii) thereof) and paragraph (h) of Section 5.1.

(f) The Bank shall have received an opinion of McGuireWoods LLP, as bond counsel to the University, dated the Effective Date, in form and substance satisfactory to the Bank and covering such matters as the Bank may reasonably request including, without limitation, the matters described in paragraphs (f) and (g) of Section 5.1.

(g) All fees and expenses due and payable in accordance with the Fee Letter and the provisions of Section 8.3 shall have been paid.

(h) All other legal matters pertaining to the execution and delivery of this Agreement and the Note shall be satisfactory to the Bank, and the Bank shall have received such other statements, certificates, agreements, documents and information with respect to the University and matters contemplated by this Agreement as the Bank shall have requested.

Section 4.2. Conditions Precedent to Each Advance.

The obligation of the Bank to make an Advance on any Advance Date is subject to the conditions precedent that: (a) the Bank shall have received a timely, complete and duly executed Request for Advance, (b) no Event of Default has occurred and is continuing, and (c) the Expiration Date shall not have occurred. Unless the University shall have otherwise previously advised the Bank in writing, delivery to the Bank of a Request for Advance shall be deemed to constitute a representation and warranty by the University that on the Advance Date all of such conditions have been satisfied.

ARTICLE V
REPRESENTATIONS AND WARRANTIES

Section 5.1. Representations and Warranties of the University.

The University hereby represents and warrants to the Bank, which representations and warranties shall survive the execution and delivery of this Agreement and the Note and the making of each Advance, as follows:

(a) Organization and Authorization. The University is an educational institution established by the Commonwealth as a public body and governmental instrumentality for the dissemination of education, duly organized and validly existing under laws of the Commonwealth.

(b) Authorization to Execute Documents. The University has full power and authority to execute and deliver this Agreement and the Note, and to perform its obligations under each of the foregoing.

(c) Obligations Legal, Valid and Binding. This Agreement has been, and the Note once executed and delivered will have been, duly and validly authorized, executed and delivered by the University, and each of this Agreement and the Note constitutes or will constitute the legal, valid and binding obligation of the University enforceable against the University in accordance with its terms, except insofar as the enforceability thereof may be limited by sovereign immunity, by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights and remedies generally, and by general principles of equity, whether applied by a court of law or equity.

(d) University Not in Default. (i) No Default or Event of Default has occurred and is continuing hereunder, and (ii) the University is not in default under any other mortgage, indenture, contract, agreement, bond resolution, instrument or other undertaking evidencing Debt of the University or which purports to be binding on the University or on any of its assets (each such mortgage, indenture, contract, agreement, bond resolution, instrument or other undertaking being referred to individually as a "Debt Instrument" and, collectively, as "Debt Instruments"), which default could reasonably be expected to have a Material Adverse Effect.

(e) No Violation. The execution, delivery and performance by the University of this Agreement and the Note do not (i) violate any provision of the Act, any other laws of the Commonwealth or the United States of America or any other applicable law, regulation, order, writ, judgment or decree of any court, arbitrator or governmental authority, or (ii) violate any provision of, constitute a default under, or result in the creation or imposition of any Lien on any of the assets of the University pursuant to the provisions of, any Debt Instrument. The University is not a party to, or otherwise subject to, any provision contained in any Debt Instrument, or any other contract or agreement which limits the amount of, or otherwise imposes restrictions on the incurring of, obligations of the University that could reasonably be expected to result in a Material Adverse Effect.

(f) Consents. The University has obtained all consents and approvals of, and has made all filings, registrations and declarations with, all governmental authorities required under the Act or other applicable law for the execution, delivery and performance by the University of this Agreement and the Note and the pledge of General Revenues hereunder, and all such consents, approvals, filings, registrations and declarations remain in full force and effect.

(g) Obligations of the University. The obligations of the University hereunder and under the Note are payable from General Revenues of the University, and the pledge of such General Revenues hereunder is a valid and legally binding pledge thereof on a parity basis with all other General Revenue Obligations.

(h) Litigation. There is no action, suit, investigation or proceeding pending or, to the best of the University's knowledge after due inquiry, threatened against or affecting the University, in which an adverse determination could reasonably be expected to have a Material Adverse Effect.

(i) Disclosure. The representations and statements made by the University herein, in the Note, and in any other document furnished to the Bank by the University in connection herewith or therewith, are accurate in all material respects. No information, exhibit or report, including, without limitation, the financial statements furnished by or on behalf of the University to the Bank, contains any untrue statement of a material fact or omits any statement of a material fact necessary to make the statements contained herein, in light of the circumstances under which they were made, not misleading, and there are no facts that the University has not disclosed to the Bank that, individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect.

(j) Financial Condition. The balance sheet of the University for the fiscal year of the University ended June 30, 2018 (or any subsequent fiscal year if annual financial statements for such fiscal year have been delivered to the Bank as required by Section 6.1(a)), and the related statements of revenues, expenses and changes in fund balances, present fairly the University's financial position as of the end of such fiscal year and the results of its operations and its income, fund balances and changes in financial position for the end of such fiscal year, in conformity with GAAP. No change has occurred relating to such balance sheet and related statements of revenues, expenses and changes (other than as are disclosed by the University to the Bank) that could reasonably be expected to have a Material Adverse Effect.

(k) Incorporation of Representations and Warranties by Reference. The representations and warranties of the University set forth in the Debt Instruments are true and accurate in all material respects.

(l) No Proposed Legal Changes. There is (i) no amendment or, to the knowledge of the University, proposed amendment to the Constitution of the Commonwealth, (ii) no published administrative interpretation of the Constitution or any other law of the Commonwealth, (iii) no legislation that has passed either house of the General Assembly of the Commonwealth, and (iv) no published judicial decision interpreting any of the foregoing, in any case which could reasonably be expected to have a Material Adverse Effect.

(m) Patriot Act Compliance. The University is not the target of any trade or economic sanctions promulgated by the United Nations or the governments of the United States, the United Kingdom, the European Union, or any other jurisdiction in which the University is located or operates (collectively, "Sanctions").

Section 5.2. Representations and Warranties of the Bank.

The Bank hereby represents and warrants to the University that this Agreement has been duly authorized by the Bank and, upon its execution and delivery by the Bank, will constitute the legal, valid and binding obligation of the Bank enforceable against the Bank in accordance with its terms except insofar as enforcement may be limited by applicable bankruptcy, insolvency, reorganization, moratorium or similar laws affecting the enforcement of creditors' rights and remedies generally, and by general principles of equity, whether applied by a court of law or equity.

ARTICLE VI
COVENANTS

Section 6.1. Affirmative Covenants.

As long as this Agreement is in effect, and until all Advances and other amounts payable hereunder and under the Note are indefeasibly paid in full, the University will perform and observe the covenants set forth below:

(a) Financial Records; Other Reports. (i) The University shall at all times maintain financial records and furnish to the Bank, as soon as available but no later than 270 days after the end of each fiscal year of the University, financial statements prepared in accordance with GAAP including (i) a balance sheet as of the end of such fiscal year, (ii) the related statements of revenues, expenses and changes in fund balances for such fiscal year, and (iii) statements of cash flows for such fiscal year, setting forth in each case in comparative form the figures for the previous fiscal year of the University, audited by the Auditor of Public Accounts of the Commonwealth and accompanied by a certificate of an Authorized Officer of the University to the effect that no Default or Event of Default has occurred and is continuing. The University shall also provide the Bank promptly upon their becoming available, copies of any non-routine periodic or special reports filed by the University with any governmental authority, if such reports indicate that any event has occurred or condition exists which could reasonably be expected to have a Material Adverse Effect.

(ii) If the University delivers any of the information described in Section 6.1(a)(i) to the Electronic Municipal Market Access established by the Municipal Securities Rulemaking Board ("EMMA") within the timeframe required under Section 6.1(a)(i), the University shall not be obligated to furnish such information to the Bank.

(b) Notice of Certain Events. The University shall notify the Bank in writing as soon as possible after the University acquires knowledge of (i) the occurrence of any Default, (ii) any change in any Bond Rating, (iii) the occurrence of any default or other event under any Debt Instrument which could reasonably be expected to have a Material Adverse Effect, and (iv) the filing of any action or the occurrence of any activity which could lead to an initiative or referendum or any other similar event which could reasonably be expected to have a Material Adverse Effect.

(c) Other Information. The University shall furnish to the Bank, as the Bank may reasonably request, such additional financial information concerning the University in order to enable the Bank to determine whether the covenants, terms and provisions of this Agreement and the Note have been complied with by the University, and for that purpose, all pertinent books, documents and vouchers relating to the University's business, affairs and properties shall at all reasonable times during regular business hours and upon reasonable prior notice be open to the inspection of such accountants or other agents (who may make copies of all or any part thereof at their own cost and expense) as shall from time to time be designated by the Bank. Without limiting the

foregoing, upon reasonable prior notice, the University will permit the Bank to visit and inspect any of the properties of the University during regular business hours and to discuss the affairs, finances and accounts of the University with its officials and any accounting firm performing services for the University, as often as the Bank may reasonably request.

(d) Compliance with Obligations and Laws. The University shall observe and comply with all of its obligations arising in connection with this Agreement, the Note and the Debt Instruments and all laws of the Commonwealth and the United States of America, including any rules and regulations thereunder, applicable to the University.

(e) Litigation. The University shall forthwith notify the Bank in writing with respect to any pending or threatened litigation with respect to the University the existence of which causes the representation set forth in Section 5.1(h) to be untrue or inaccurate in any material respect.

(f) Licenses, Permits, Etc. The University will take all necessary and appropriate action to ensure the continuance in force of all material consents, licenses, permits, orders, decrees, approvals, authorizations, registrations and filings obtained or made in connection with this Agreement and the Note or necessary to maintain the enforceability against the University of this Agreement or the Note.

(g) Books and Records. The University shall keep or cause to be kept adequate and proper records and books of account with respect to its revenues, expenses and assets in which complete and correct entries shall be made.

(h) Maintenance of Existence. The University shall use its best efforts to preserve and maintain (i) its existence as an educational institution and a public body and governmental instrumentality of the Commonwealth, and (ii) its rights, franchises and privileges material to its ability to repay the obligations hereunder and under the Note.

(i) Other Matters. The University shall execute and deliver to the Bank all such documents and instruments, and do all such acts and things, as may be necessary or reasonably required by the Bank to enable the Bank to exercise and enforce its rights under this Agreement and the Note and to realize thereon, and record and file and re-record and re-file all such documents and instruments, at such time or times, in such manner and at such place or places, all as may be necessary or reasonably required by the Bank to validate, preserve and protect its rights under this Agreement and the Note.

(j) Patriot Act Compliance. The University shall observe and comply with (a) all Sanctions, (b) all laws and regulations that relate to money laundering, any predicate crime to money laundering, or any financial record keeping and reporting requirements related thereto, (c) the U.S. Foreign Corrupt Practices Act of 1977, as amended, (d) the U.K. Bribery Act of 2010, as amended, and (e) any other applicable anti-bribery or anti-corruption laws and regulations.

Section 6.2. Negative Covenants.

As long as this Agreement is in effect, and until all Advances and other amounts payable hereunder and under the Note are indefeasibly paid in full, the University shall not, unless the Bank shall otherwise consent in writing:

(a) amend, supplement, extend, modify, waive, revise or otherwise alter or terminate any Debt Instrument if such amendment, supplement, extension, modification, waiver, revision, alteration or termination could reasonably be expected to result in a Material Adverse Effect;

(b) violate any law, rule, regulation, or governmental order to which it is subject, which violation could reasonably be expected to result in a Material Adverse Effect; or

(c) merge, consolidate, sell, transfer, lease or otherwise dispose of all or any substantial part of its property, other than a merger with or consolidation into any other governmental entity that assumes all obligations of the University under this Agreement and the Note.

ARTICLE VII
EVENTS OF DEFAULT AND REMEDIES

Section 7.1. Events of Default.

Each of the following events shall constitute an event of default (an "Event of Default") hereunder:

(a) Certain Payments. The University shall fail to pay the principal of or interest on any Advance (other than accelerated Advances) when the same shall become due and payable, whether at maturity or as otherwise scheduled, and such failure shall continue unremedied for a period of five (5) calendar days or more.

(b) Default under General Revenue Obligations. The University shall default in the payment of principal or interest on any General Revenue Obligations; provided that, for purposes of this Section 7.1(b) only, "General Revenue Obligations" shall only include Debt of the University described in clauses (ii) and (iv) of the definition of "Debt" in Section 1.1.

(c) Invalidity. The University challenges the validity or enforceability of any material provision of this Agreement or the Note concerning the payment of principal or interest, or any court or governmental authority having jurisdiction over this Agreement or the Note finds or rules that any material provision of this Agreement or Note concerning the payment of principal or interest is not valid and binding on the University.

(d) Appointment of Receiver, Etc. (i) An order or decree is entered, with the consent or acquiescence of the University, appointing a receiver or receivers of the University or of the revenues thereof, or if such order or decree, having been entered without the consent or acquiescence of the University, is not vacated or discharged or stayed on appeal within sixty (60) days after the entry thereof; or (ii) any proceeding is instituted, with the consent or acquiescence of the University, for the purpose of effecting

a composition between the University and its creditors or for the purpose of adjusting the claims of such creditors pursuant to any federal or state statute now or hereafter enacted.

(e) Certain Other Payments. The University shall fail to pay accelerated principal of or interest on any Advance, or shall fail to pay any fee or other amount payable hereunder, when the same shall become due and payable.

(f) Representations Untrue. Any representation, warranty, certification or statement made by the University in or pursuant to this Agreement or in any certificate, financial statement or other document delivered pursuant to this Agreement or incorporated herein, shall (in any such case) have been incorrect or untrue in any material respect when made or deemed to have been made.

(g) Covenant Defaults. The University shall default in the due performance or observance of any term, covenant or agreement contained herein (other than those covered by paragraph (a) or (e) above).

(h) Invalidity. Any material provision of this Agreement or the Note concerning the payment of principal or interest shall, for any reason, cease to be valid and binding on the University.

Section 7.2. Remedies.

(a) Upon the occurrence and during the continuance of an Event of Default, the Bank may:

(i) immediately terminate its obligation to make Advances under the Facility; and

(ii) immediately, without presentment, demand, protest, notice of dishonor or any other notice of any kind, all of which are hereby expressly waived, anything contained herein or in the Note to the contrary notwithstanding, declare all outstanding Advances, all interest thereon and all other amounts payable under this Agreement and the Note to be immediately due and payable (and in the case of an Event of Default under Section 7.1(d), such amounts shall automatically become due and payable).

(b) In addition to the rights and remedies set forth in paragraph (a) above, in the case of any Event of Default, the Bank may exercise any or all other rights and remedies existing at law or in equity (including, without limitation, the right to proceed by appropriate court action, either at law or in equity, to enforce performance by the University of the applicable representations and warranties and covenants of this Agreement and the Note or to recover damages for the breach thereof).

(c) The Bank acknowledges that, if at any time there are insufficient funds to pay debt service on the University's General Revenue Obligations, as described in Section 7.3 of the University's bond resolution adopted August 31, 2015 (the "Bond Resolution"), a trustee may be appointed to represent the holders of Parity Credit

Obligations (as defined in the Bond Resolution) and to provide for a pro-rata distribution of available funds among all Parity Credit Obligations, including the obligations of the University to the Bank under this Agreement. The provisions of such Section 7.3 (which are referred to herein as the "Bond Provisions") are included in substantially similar form in the University's prior bond resolutions, are required to be included in its future bond resolutions, and are hereby incorporated into this Agreement by reference. The Bank, as the holder of a Parity Credit Obligation, agrees to the appointment of such trustee and covenants to cooperate with such trustee in the pro-rata distribution of funds among Parity Credit Obligations as provided in the Bond Provisions.

ARTICLE VIII
MISCELLANEOUS

Section 8.1. Notices.

Unless otherwise specifically provided herein, all notices and other communications hereunder shall be in writing and shall be given by courier, United States certified or registered mail, or facsimile transmission. Notices and communications hereunder shall be effective when received and shall be sent to the following addresses (or to such other address(es) of which either party hereto shall notify the other party in accordance herewith):

If to the Bank, to:

[Lender Name]
[Lender Address]
Attention:
Telephone:

If to the University, to:

Virginia Polytechnic Institute and State University
210 Burrus Hall
800 Drillfield Drive
Blacksburg, Virginia 24061
Attention: John J. Cusimano, University Treasurer
Telephone: (540) 231-7094

Section 8.2. Liability of the Bank.

The University assumes all risks with respect to the use of the proceeds of each Advance. Neither the Bank nor any of its officers, directors, employees or agents shall be liable or responsible for (i) the use which may be made of the proceeds of any Advance, (ii) the form, validity, sufficiency or genuineness of documents, or of any endorsement(s) thereon (other than the validity as against the Bank of any agreement to which the Bank is a party), even if such documents should in fact prove to be in any or all respects invalid, insufficient, fraudulent or forged, (iii) the lack of validity or enforceability

of this Agreement (other than the validity or enforceability as against the Bank), or (iv) any other circumstances whatsoever in making or failing to make payment under this Agreement or the Note; provided, however, that the University shall have a claim against the Bank, and the Bank shall be liable to the University, to the extent of any direct, as opposed to consequential, damages suffered by the University which the University proves were caused by (a) the Bank's willful misconduct or negligence in determining whether a Request for Advance presented hereunder complied with the terms hereof, or (b) the Bank's willful failure to make an Advance required to be made by it hereunder after receipt by it of a Request for Advance. In furtherance and not in limitation of the foregoing, the Bank may accept documents that appear on their face to be in order, without responsibility for further investigation, regardless of any notice or information to the contrary.

Section 8.3. Costs and Expenses.

The University agrees to pay (a) on or prior to the Effective Date, all reasonable costs and expenses paid or incurred by the Bank, including the reasonable fees and out-of-pocket expenses of counsel for the Bank, in connection with the preparation, review, execution and delivery of this Agreement and the Note, and (b) upon demand and to the extent allowable by law, all other reasonable costs and expenses paid or incurred by the Bank, including the reasonable fees and out-of-pocket expenses of counsel for the Bank, or otherwise arising in connection with this Agreement or the Note, including without limitation, in connection with any transfer, amendment, supplement, modification or waiver with respect to this Agreement or the Note, the enforcement hereof or thereof or the protection of the rights of the Bank hereunder or thereunder.

Section 8.4. Participants.

The Bank shall have the right to grant participations from time to time (to be evidenced by one or more participation agreements or certificates of participation (each a "Participation Agreement")) in this Agreement and the Facility to one or more other persons or entities (each a "Participant"); provided, that the grant of any such participation shall not terminate or otherwise affect any obligation of the Bank hereunder. Each Participant purchasing such a participation shall, in the discretion of the Bank, have all rights of the Bank hereunder to the extent of the participation purchased; provided that the grant of any such participation (1) shall not require the University to deal with any Participant for matters related to this Agreement and the Facility, and (2) shall require the University to deal only with the Bank for matters related to this Agreement and the Facility. In connection with the granting of participations, the Bank may disclose to any proposed Participant any information that the University delivers or discloses, or causes to be delivered or disclosed, pursuant to this Agreement. The Bank shall give notice to the University of each Participant that is granted a participation pursuant to this Section 8.4; provided that the failure to give such notice shall not affect the validity of such participation.

Section 8.5. Successors and Assigns.

This Agreement shall be binding upon and inure to the benefit of the University and the Bank and their respective successors and assigns, except that (a) the University shall not have the right to assign its rights hereunder or any interest herein without the prior written consent of the Bank, and (b) the Bank shall not have the right to assign its rights hereunder or any interest herein except (i) in connection with a participation as provided in Section 8.4, (ii) after the occurrence and during the continuance of an Event of Default, and (iii) otherwise with the prior written consent of the University (such consent not to be unreasonably withheld, conditioned or delayed). If the Bank requests the University's consent to such an assignment under clause (b)(iii) above and (1) the University fails to respond within 120 days of the University's receipt of the request, or (2) the University unreasonably withholds, conditions or delays its consent to such assignment for 120 days after its receipt of the request, then the University shall be deemed to have consented to such assignment.

Section 8.6. Final Agreement; Modification or Waiver of this Agreement.

This Agreement and the Note are intended by the parties hereto as final expressions of their agreement with respect to the subject matter hereof and thereof, are intended as complete and exclusive statements of the terms and conditions of that agreement, and may not be contradicted, modified or supplemented in any way by evidence of any prior or contemporaneous written or oral agreements of the University and the Bank. No modification or waiver of any provision of this Agreement (including this Section 8.6) shall be effective unless the same shall be in writing and signed by the Bank and the University. Any modification or waiver referred to in this Section 8.6 shall be effective only in the specific instance and for the specific purpose for which given. No notice to or demand on the University in any case shall entitle the University to any other or further notice or demand in the same, similar or other circumstances.

Section 8.7. No Waiver of Rights by the Bank; Cumulative Rights.

No course of dealing or failure or delay on the part of the Bank or the University in exercising any right, power or privilege hereunder shall preclude any other or further exercise of any right, power or privilege. The rights of the Bank and the University under this Agreement and the Note are cumulative and not exclusive of any rights or remedies which the Bank or the University would otherwise have.

Section 8.8. Governing Law.

The obligations of the Bank and the University hereunder and under the Note shall be construed in accordance with and governed by the laws of the Commonwealth. Any suits and actions arising out of this Agreement or the Note shall be instituted in a court of competent jurisdiction in the Commonwealth.

Section 8.9. Severability.

In case any one or more of the provisions contained in this Agreement should be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions contained herein shall not in any way be affected or impaired

thereby. The parties shall negotiate in good faith to replace any invalid, illegal or unenforceable provision with a valid provision, which, to the extent possible, will preserve the economic effect of the invalid, illegal or unenforceable provisions.

Section 8.10. Counterparts.

This Agreement may be executed in two counterparts, each of which shall constitute an original but both of which, when taken together, shall constitute but one document, and shall become effective when copies hereof, when taken together, bear the signatures of each of the parties hereto.

Section 8.11. Captions.

The captions in this Agreement are for convenience only and do not define or limit the scope or intent of any provisions of this Agreement.

Section 8.12. Patriot Act.

The Bank hereby notifies the University that pursuant to the requirements of the Patriot Act, it is required to obtain, verify and record information that identifies the Issuer, which information includes the name and address of the Issuer and other information that will allow the Bank to identify the University in accordance with the Patriot Act. The University shall promptly provide such information upon request by the Bank.

[Signatures begin on following page]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective representatives thereunto authorized as of the date first above written.

UNIVERSITY:

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

By:_____
Name:_____
Title:_____

[Signatures continue on following page]

BANK:

[LENDER NAME]

By:_____
Name:_____
Title:_____

EXHIBIT A

FORM OF PROMISSORY NOTE

$_____.00 _____, 2018
Blacksburg,
Virginia

FOR VALUE RECEIVED, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, an educational institution established by the Commonwealth of Virginia as a public body and governmental instrumentality for the dissemination of education (the "University"), promises to pay to the order of [LENDER NAME], a national banking association, or its registered assigns (the "Bank"), the lesser of the unpaid principal amounts advanced by the Bank to the University hereunder (the "Advances") and the principal sum of _____ MILLION AND NO/100 DOLLARS ($_____.00) on the Expiration Date (as defined in the Credit Agreement, as hereinafter defined) or in the case of a Liquidity Draw (as defined in the Credit Agreement) in accordance with the terms of the Credit Agreement. The University promises to pay the unpaid principal amount of the Advances and interest thereon on the dates and at the rate or rates provided for in the Credit Agreement. All such payments of principal and interest shall be made in lawful money of the United States of America, in immediately available funds, to such account which the Bank may designate in accordance with the Credit Agreement.

This note is the "Note" referred to in the Revolving Credit Agreement dated as of even date herewith by and between the University and the Bank (as the same may be amended from time to time, the "Credit Agreement"). Terms defined in the Credit Agreement are used herein with the same meanings.

All Advances and repayments of the principal of the Advances may be recorded by the Bank and appropriate notations to evidence the foregoing information with respect to the Advances may be endorsed by the Bank on the schedule attached hereto, or on a continuation of such schedule attached to and made a part hereof; provided, that the failure of the Bank to make any such recordation or endorsement shall not affect the obligations of the University hereunder or under the Credit Agreement.

As provided in the Credit Agreement, this note is payable from General Revenues of the University, which General Revenues have been pledged to the Bank by the University on a parity basis with all other General Revenue Obligations. This note and the interest hereon shall not be deemed to constitute a debt or liability of the Commonwealth of Virginia, legal, moral or otherwise. Neither the Commonwealth of Virginia nor the University shall be obligated to pay the principal of or interest on this note or other costs incident hereto except from the sources noted above, and neither the faith and credit nor the taxing power of the Commonwealth of Virginia are pledged to the payment of the principal of or interest on this note or other costs incident hereto.

IT IS HEREBY CERTIFIED, RECITED AND DECLARED that all conditions, acts and things required by the Constitution and laws of the Commonwealth of Virginia to exist, to have happened and to have been performed precedent to and in the issuance of this note do exist, have happened and have been performed in due time, form and manner as required by law and that the issuance of this note does not violate any constitutional or statutory limitation of indebtedness.

IN WITNESS WHEREOF, the University has caused this note to be executed in the name of and for the University, and has caused this note to be dated as of the date set forth above.

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

By:_____
Name:_____
Title:_____

SCHEDULE TO PROMISSORY NOTE

ADVANCES AND PAYMENTS OF PRINCIPAL

Date	Amount of Advance	Amount of Principal Repaid	Notation Made By

EXHIBIT B

FORM OF REQUEST FOR ADVANCE

[Date]

[Lender Name]
[Lender Address]
Attention:

Ladies and Gentlemen:

Reference is made to the Revolving Credit Agreement dated as of _____, 2018 (the "Credit Agreement"), by and between Virginia Polytechnic Institute and State University (the "University") and [Lender Name] (the terms defined therein being used herein as therein defined). The University hereby requests, pursuant to Section 2.3 of the Credit Agreement, that you make an Advance under the Credit Agreement, and in that connection sets forth below the following information relating to such Advance:

(a) The amount of the Advance requested is $_____.

(b) The Advance Date requested is _____.

The University hereby certifies that the proceeds of the Advance will be used by the University for working capital, for general corporate and operating purposes or for another lawful purpose.

This Advance should be made by wire transfer of immediately available funds to the undersigned in accordance with the instructions set forth below:

[Insert wire instructions]

Very truly yours,

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

By:_____
Authorized Officer

EXHIBIT C

FORM OF REQUEST FOR TERMINATION OR REDUCTION

[Date]

[Lender Name]
[Lender Address]
Attention:

Ladies and Gentlemen:

Reference is made to the Revolving Credit Agreement dated as of _____, 2018 (the "Credit Agreement"), by and between Virginia Polytechnic Institute and State University (the "University") and [Lender Name] (the terms defined therein being used herein as therein defined).

[The University hereby requests that the Credit Agreement be terminated in accordance with, and subject to, the terms thereof.]

OR

[The University hereby requests that the Available Commitment be permanently reduced from [insert amount as of the date of Certificate] to [insert new amount], such reduction to be effective on _____.] The reduction in the Available Commitment is an integral multiple of $1,000,000.

Very truly yours,

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

By:_____
Authorized Officer

EXHIBIT D

FORM OF REQUEST FOR EXTENSION OF SCHEDULED EXPIRATION DATE

[Date]

[Lender Name]
[Lender Address]
Attention:

Ladies and Gentlemen:

Reference is made to the Revolving Credit Agreement dated as of _____, 2018 (the "Credit Agreement"), by and between Virginia Polytechnic Institute and State University (the "University") and [Lender Name] (the terms defined therein being used herein as therein defined). Pursuant to Section 3.5 of the Credit Agreement, the University hereby requests an extension of the Scheduled Expiration Date to _____, 20___.

The University hereby represents and warrants that, except as noted below, no Default or Event of Default has occurred and is continuing and all representations and warranties of the University in the Credit Agreement are true and correct on the date hereof.

[IDENTIFY PENDING DEFAULT OR EVENT OF DEFAULT]

IN WITNESS WHEREOF, the undersigned has executed and delivered this Request for Extension of Scheduled Expiration Date as of the ____ day of _____, 20___.

Very truly yours,

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

By:_____
Authorized Officer

EXHIBIT E

FORM OF NOTICE OF EXTENSION OF SCHEDULED EXPIRATION DATE

[Date]

Virginia Polytechnic Institute and State University
220 Burrus Hall
800 Drillfield Drive
Blacksburg, Virginia 24061
Attention: University Treasurer

Ladies and Gentlemen:

Reference is made to the Revolving Credit Agreement dated as of _____, 2018 (the "Credit Agreement"), by and between Virginia Polytechnic Institute and State University (the "University") and [Lender Name] (the terms defined therein being used herein as therein defined). Pursuant to Section 3.5 of the Credit Agreement, the University has requested an extension of the Scheduled Expiration Date to _____, 20___.

Please be advised that:

[COMPLETE AS APPROPRIATE.]

1. At the request and for the account of the University, the Bank hereby extends the Scheduled Expiration Date to _____, 20___ [INCLUDE ADDITIONAL TERMS IF APPLICABLE].

2. Except as specifically provided in the paragraph 1 above, all of the terms and conditions of the Credit Agreement remain unchanged and in full force and effect.

3. This Notice of Extension of Scheduled Expiration Date is an integral part of the Credit Agreement.

[OR]

The Bank hereby elects not to extend the Scheduled Expiration Date.

IN WITNESS WHEREOF, the undersigned has executed and delivered this Notice of Extension of Scheduled Expiration Date as of the ____ day of _____, 20___.

Very truly yours,

[LENDER NAME]

By:_____
Name:_____
Title:_____

2018-19 Faculty Compensation Plan

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 17, 2018

The university continues to use the parameters provided in the "Consolidated Salary Authorization for Faculty Positions in Institutions of Higher Education" document from the Secretary of Education to develop the annual Faculty Compensation Plan. This document defines the qualification criteria for teaching and research faculty and administrative and professional faculty, provides guidance on the authorized salary average for full-time teaching and research faculty positions, and requires board approval.

In accordance with the most recent Consolidated Salary Authorization, the 2018-19 Faculty Compensation Plan provides information about (1) the 2018-19 pay structure, (2) the promotion and tenure process, (3) the annual evaluation and salary adjustment process for teaching and research faculty and administrative and professional faculty, and (4) salary adjustments within the evaluation period.

This faculty compensation plan covers only faculty positions. The compensation plan for staff is administered separately by the university administration in accordance with the Board of Visitors' approval of the university's Management Agreement, effective July 1, 2006, as well as guidance from the commonwealth and the state Department of Human Resource Management.

Authorized Salary Average

The Authorized Salary Average applies to all full-time teaching and research positions with the rank of professor, associate professor, assistant professor, instructor, or lecturer that are engaged in teaching and research for 50 percent or more of the time. As noted in the Consolidated Salary Authorization document, "Institutions are expected to award differential salary increases to their faculty based on performance and other circumstances such as promotions, tenure, and changes in responsibility. The net effect of all salary actions should be an average salary that approximates the state authorized salary average."

The commonwealth measures the adequacy of faculty salaries by comparing the institutional average with the average of a unique benchmark group for each public college and university. The benchmark groups are constructed by matching characteristics of colleges and universities, such as size of the student body, percentage of degrees granted in various disciplines, percentage of graduate degrees conferred, and research activity levels. The General Assembly established an objective in the late 1980s to fund a faculty salary average at all institutions that would approximate the salary average at the **60th** percentile in the ranking of salary averages in individual benchmark groups. The State Council of Higher Education for Virginia (SCHEV) last reviewed and

updated each institution's Faculty Salary Peer Group in 2007. The current benchmarking of Virginia Tech's Faculty Salary Average is made using the peer group established in 2007.

The Authorized Salary Average is updated from time to time by SCHEV. However, given that the University's Actual Salary Average currently exceeds the Authorized Salary Average, the university's current focus is the comparison of the Actual Salary Average to peer averages to determine the university's competitive position. This is consistent with Joint Legislative Audit and Review Commission's recent review and recommendations.

Actual Salary Average

For Fall 2016, Virginia Tech's Actual Salary was $100,552. This placed Virginia Tech at the 35th percentile of its peer group for Fall 2016, based on the most recent peer salary data available data from the Integrated Postsecondary Education Data System (IPEDS). Fall 2017 peer salary data is not yet available; however, based upon SCHEV's forecast of salary escalation at peer institutions, the university estimates that the Actual Salary Average will rank at the 33rd percentile of peer institutions for Fall 2017. Summary statistics are provided in the table below. The university's competitive positioning among peers for Fall 2017 will be recomputed once IPEDS data becomes available.

	Fall 2016	Fall 2017	Change
60th Percentile	$109,878	$112,955*	2.8%
Actual Average Salary	$100,552	$102,470	1.9%
Rank - Actual	18 of 26	20 of 26*	-2
Percentile - Actual	35th	33rd*	-2

**IPEDS peer salary data for Fall 2017 is not yet available. Estimates are based on the State Council of Higher Education's forecast of 2.8% salary escalation at peer institutions.*

Attachment A provides a list of the university's peer group and the comparative estimated salary averages for Fall 2016.

2018-19 Pay Structure

In accordance with the intent of the Consolidated Salary Authorization, a pay structure for the teaching and research faculty for 2018-19 is presented in Attachment B. This plan is derived from the 2017-18 approved plan. It incorporates the proposed merit adjustment for 2018-19. The attachment also displays the normal entrance rate for each faculty category along with the change from the approved compensation rate for each rank, along with the distribution of faculty across the ranks.

The salary average for administrative and professional faculty may not exceed the authorized salary average for the teaching and research faculty by more than 35 percent.

Promotion, Tenure, and Continued Appointment

Promotion to a higher rank and appointment with tenure may be granted to faculty members on a regular faculty appointment who have demonstrated outstanding accomplishments in an appropriate combination of learning, discovery, and engagement. A current curriculum vitae together with student and peer evaluations of teaching, reprints of publications, evaluations by external reviewers from the same or a related field, and other similar documents comprise a dossier which furnishes the principal basis for promotion and tenure decisions. Faculty members being considered for either promotion or the awarding of tenure will have their dossiers reviewed at three levels: by a departmental committee and the head or chair; by a college committee and the dean; and by a university committee and the provost. Each candidate for promotion or tenure will be evaluated in the light of the tripartite mission of the university: learning, discovery, and engagement. Although not all candidates can be expected to have equal levels of commitment or equal responsibilities in each of these missions, a high level of general competence is expected in recognition of the need for flexibility in the future establishment of priorities in academic programs. Beyond that basic foundation of competence, decisions related to tenure or promotion to associate professor will require evidence of excellence in at least one area.

The university's mission and commitment as a major research institution require high accomplishment for promotion to professor. Faculty members must demonstrate a high level of competence in an appropriate combination of instruction, outreach, and professional activities relevant to their assignment. Because of the university's mission and commitment as a major research institution, successful candidates for the rank of professor must demonstrate excellence in research, scholarship, or creative achievement, as appropriate for the candidate's discipline and assignment. Promotion to the rank of professor is contingent upon national or international recognition as an outstanding scholar and educator.

In addition to the material contained in this section, the Faculty Handbook provides detailed policies and procedures for the departmental evaluation, the college evaluation, and the university evaluation.

Members of the Library faculty and Cooperative Extension faculty not holding appointments in a collegiate department may be considered for continued appointment or for promotion in faculty rank in recognition of appropriate professional accomplishments. Candidates for promotion or continued appointment will be reviewed at two levels: first by the University Libraries or Extension promotion and continued appointment committee and dean of University Libraries or director of Virginia Cooperative Extension, and second by the University Promotion and Continued Appointment Committee and the provost.

The following raises are recommended for promotions to:

Professor	$7,000
Associate Professor	5,000
Assistant Professor	3,000

For academic-year faculty members who have Research Extended Appointments (10, 11, or 12 month appointments funded by sponsored projects) with salaries adjusted in accordance with formulas in Policy 6200 - Policy on Research Extended Appointments, or for those who have a limited-term appointment as department head or other administrator, the stipend is adjusted by the same conversion rate to preserve its value when the faculty member returns to the academic-year base appointment.

Clinical Faculty

The clinical faculty track provides for long-term, full-time or part-time faculty appointments to individuals whose primary responsibilities are instruction and/or service in a clinical setting, such as veterinary medicine. Tenure cannot be earned in these ranks, and time spent in one of these ranks is not applicable toward probationary tenure-track faculty service. There are four clinical ranks beginning with Clinical Instructor. Those clinical faculty members with outstanding performance may be considered for promotion in rank by the relevant departmental and college promotion and tenure committees, with administrative approval by the provost.

The following raises are recommended for promotions to:

Clinical Professor	$7,000
Clinical Associate Professor	5,000
Clinical Assistant Professor	3,000

Collegiate Faculty

The collegiate professor series provides for short- or long-term, full- or part-time, non-tenure-track faculty appointments for individuals who bring specialized expertise to the instructional programs of the university, thereby complementing the qualifications and contributions of tenure-track faculty. There are three collegiate professor ranks, beginning with Collegiate Assistant Professor. Tenure will not be awarded at any of these ranks and service at these ranks is excluded from the pre-tenure probationary period if the faculty member is subsequently appointed to a tenure-track position. Collegiate professors with a record of significant scholarly and/or professional achievement may be considered for promotion in rank by the relevant departmental and college promotion and tenure committees, with administrative approval by the provost.

Collegiate Professor	$7,000
Collegiate Associate Professor	5,000
Collegiate Assistant Professor	3,000

Professor of Practice

The professor of practice series provides for short- or long-term, full- or part-time, non-tenure-track faculty appointments for individuals who bring specialized expertise to the instructional programs of the university, thereby complementing the qualifications and contributions of tenure-track faculty. There are three professor of practice ranks, beginning with Assistant Professor of Practice. Tenure will not be awarded at any of these ranks and all service at one of these ranks will be excluded from the probationary period should the faculty member later be appointed to a tenure-track position. Professor of practice faculty members with a record of outstanding performance may be considered for promotion in rank by the relevant departmental and college promotion and tenure committees, with administrative approval by the provost.

Professor of Practice	$7,000
Associate Professor of Practice	5,000
Assistant Professor of Practice	3,000

Instructors

The instructor track provides for full- and part-time appointments to individuals whose primary responsibilities are to the undergraduate instructional program. Tenure will not be awarded at any of these ranks and all service at any instructor rank will be excluded from the probationary period should the faculty member later be appointed to a tenure track position. There are three ranks in the series: Instructor, Advanced Instructor, and Senior Instructor. Those instructors with outstanding performance may be considered for promotion in rank by the relevant departmental and college promotion and tenure committees, with administrative approval by the provost.

The following raises are recommended for promotions to:

Senior Instructor	$5,000
Advanced Instructor	3,000

Extension Agents

There are three ranks for extension agents: Associate Extension Agent, Extension Agent, and Senior Extension Agent. Criteria for promotion in rank include educational preparation, performance, and professionalism. The Director of Cooperative Extension makes a recommendation to the Provost based on an evaluation of the candidate's dossier and recommendations of the Peer Review Committees, District Director, and Associate Directors of Cooperative Extension.

The following raises are recommended for promotions within Cooperative Extension:

Senior Extension Agent	$5,000
Extension Agent	3,000

In addition to the rank promotions within the faculty categories described above, faculty may be promoted to ranks within other faculty categories, as appropriate (for example, an Instructor may be promoted to a rank within the Professor of Practice or Collegiate Faculty categories.)

At the June meeting each year, the university will submit to the Board of Visitors a report of recommended promotion, tenure, and continued appointment actions for review and approval.

Annual Evaluation and Salary Adjustments

Teaching and Research Faculty

An evaluation of every faculty member's professional performance is held each year. All persons holding non-temporary faculty appointments are asked to prepare a report at the end of each academic year (or other appropriate 12-month period) citing their instructional activities, creative scholarship, and other professional activities and recognitions during the year. Salary recommendations are based upon performance documented in these annual reports, which are reviewed by departmental personnel committees in some cases, by the department head or chair, and the dean.

Salary adjustments are based on merit; they are not automatic. Recommendations for salary adjustments originate with the department head or chair and are reviewed by the dean. At the university level, the dean reviews the salary adjustment recommendations at a formal salary hearing with the president, the provost, the chief financial officer, and others as needed.

Administrative and Professional Faculty

Administrative and Professional Faculty are comprised of Senior Administrators and Managers and Professionals. Senior Administrators perform work directly related to management of the educational and general activities of the institution at least 50 percent or more of their contractual time, and typically serve in executive leadership roles such as vice president, dean, and assistant or associate vice president or dean. Managers have responsibility for supervision and evaluation of a significant number of staff and/or professional faculty, and budgetary responsibility for their unit or a substantive program. Professionals provide direct service to students, other university constituencies, or clients external to the university as part of the university's missions of learning, discovery, and engagement. Professionals include, but are not limited to, extension agents, librarians, coaches, physicians, lawyers, engineers, architects, student or academic affairs professionals, development officers, specialists in public relations, human resources, information technology, and financial specialists.

Evaluations are based upon standards set by the supervisor with the participation of the faculty member and relate closely to the duties inherent in the functional title and job description of the position. Annually set expectations become one of the important criteria

for judging professional job performance in the subsequent year. In addition to maintaining a high level of performance in carrying out their job-related duties and responsibilities, senior administrators, managers, and professionals are expected to participate in and provide leadership of departmental, divisional, or university-wide committees, special university-wide assignments, or similar activity on behalf of important university priorities.

Salary adjustments are based on merit; they are not automatic. Recommendations for salary adjustments originate with the supervisor and are reviewed as appropriate by the department head, dean, and vice president. At the university level, the dean or vice president reviews the salary adjustment recommendations at a formal salary hearing with the president, the provost, the chief financial officer, and others as needed.

Research Faculty

Research faculty are those with the titles of research associate, senior research associate, postdoctoral associate, research scientist, senior research scientist, research assistant professor, research associate professor, research professor, project associate, senior project associate, or project director. Research faculty appointments are intended to promote and expedite the research activities of the university. Tenure cannot be earned in these ranks and service is not applicable toward probationary faculty service.

Each research faculty member is evaluated and given a merit adjustment on the same schedule for evaluations and raise recommendations as the other faculty groups. Salary adjustments are based on merit; they are not automatic. An annual performance review by the principal investigator and/or department head becomes part of the basis for salary adjustments. Recommendations for salary adjustments originate with the supervisor (usually the principal investigator or the department head or chair) and are reviewed as appropriate by the department head or chair, dean, and vice president for research and innovation. At the university level, the dean or vice president reviews the salary adjustment recommendations at a formal salary hearing with the president, the provost, the chief financial officer, and others as needed.

Other Salary Adjustments

Faculty salary adjustments are normally reviewed and approved by the Board of Visitors in two phases: adjustments for promotion are recommended at the June meeting and adjustments based on performance are recommended at the fall meeting. In addition to this process, it is sometimes necessary to adjust the salaries of specific faculty members at other times during the fiscal year. These adjustments are primarily for changes in duties and responsibilities, for special temporary assignments, for retention or other exceptional needs, and for faculty selected for a different position as part of a search. Adjustments on the anniversary date of appointment for a restricted faculty member may also be approved in lieu of the normal merit process.

To recognize continued educational attainment, faculty members may receive a base salary adjustment of up to $3,000 for completion of the doctorate effective upon official certification by the degree-granting institution that all requirements have been met for award of the degree.

The president, provost, and chief financial officer are authorized to administer the faculty compensation plan during the year and act upon requests for salary adjustments. The President has issued a set of guidelines establishing the parameters for approval of special salary adjustments. By separate resolution, the Board has delegated authority to the President or designee for approval of changes in employment status that do not involve any salary action, salary adjustments made in accordance with existing policies and standard formulas, off-cycle salary adjustments less than 10 percent, new appointments and salary adjustments for faculty members on restricted contracts, and new appointments of non-tenure track instructional faculty or administrative and professional faculty below the level of senior administrator and their direct reports. The quarterly Personnel Changes Report will reflect those actions of strategic importance to the institution as identified in the resolution.

Faculty Research Incentive Plan

During 2011-12, a university workgroup developed a university savings program by incentivizing faculty research activities. This effort resulted in the Board's creation of a Faculty Research Incentive Program (FRIP) that has similarities to programs at peer institutions. This plan was implemented in 2012-13 and will be continued in 2018-19.

The goal of the FRIP is to provide an incentive for principal or co-principal investigators to secure additional competitively awarded, externally sponsored activities. Through the leveraging of appropriately charged time to competitive grants and contracts, research time that is funded by departments or colleges can be reduced, resulting in salary savings that can be used to both support the incentive program as well as to support academic initiatives.

One-time research incentive payments are made from department or college salary savings and are based on a minimum savings threshold that is applied equitably within departments or colleges. Faculty must apply in advance to be considered for the program. Research incentive payments must be approved by the department head or chair, the dean, and the vice president for research and innovation (or the appropriate administrators based on reporting structure); all disapprovals must also be reviewed by each management level. When salary savings result in a reduction in faculty assignments, those salary savings are excluded from the program.

Implementation of the 2018-19 Merit Review and Compensation Process

Recognizing the critical nature of faculty compensation, the university's standing relative to the 60th percentile of the university's peer group average salary, the higher levels of competing offers being received by key faculty, and to minimize the high cost of turnover,

the university proposes continuing the traditional annual merit-based faculty salary increase program in 2018-19.

This plan authorizes management to plan and budget for the resource allocations necessary to support a merit-based faculty salary increase averaging 2.0 percent for faculty for 2018-19.

To implement the merit review and compensation program the Budget Office will develop salary pools for each academic and administrative area based upon 2.0 percent of the actual salary expenses prior to this 2018-19 merit process.

The university may also elect to create a supplemental pool to achieve certain targeted salary compensation or retention needs. For example, in some years the university has worked to address issues such as salary compression and equity needs. For 2018-19 such changes may result from one or more of the following processes:

- The university establishes a special pool of funds to address salary inequity and retention issues for specific faculty, such as national distinction. If implemented, the funding will only be used to make adjustments based on evaluations of specific circumstances surrounding individual faculty members. As such, these adjustments would not be available to all faculty members and may occur at any time during the year, subject to approval by the Board. Based on the uncertainty of the State Budget for 2018-19, the university currently envisions funding in the range of zero to 0.7 percent in support of the national distinction program.

- The President may use a special pool of funds to adjust individual salary recommendations made by the vice presidents and deans when he determines that a different adjustment is warranted.

RECOMMENDATION:

That the proposed 2018-19 Faculty Compensation Plan be approved.

June 4, 2018

Attachment A

VIRGINIA TECH

Peer Salary Benchmarking

Fall 2016

Institution	Average Salary [1]	Rank
California-Berkeley, University of	$ 146,987	1
Cornell University	132,028	2
Southern California, University of	125,227	3
California-Davis, University of	123,211	4
Maryland-College Park, University of	115,676	5
Ohio State University-Main Campus	109,660	6
Washington-Seattle Campus, University of	107,873	7
Illinois at Urbana-Champaign, University of	107,091	8
Purdue University-Main Campus	106,817	9
Wisconsin-Madison, University of	106,320	10
Rutgers University-New Brunswick/Piscataway	105,693	11
Minnesota-Twin Cities, University of	104,978	12
Michigan State University	103,699	13
Michigan-Ann Arbor, University of	103,605	14
Florida, University of	102,592	15
Pennsylvania State University-Main Campus	102,129	16
Texas A&M University	101,957	17
Virginia Tech	**100,522**	**18**
Colorado at Boulder, University	99,991	19
Stony Brook University	99,854	20
Iowa State University	97,383	21
North Carolina State University at Raleigh	96,631	22
Pittsburgh-Main Campus, University of	95,398	23
SUNY at Buffalo	92,257	24
Missouri-Columbia, University of	83,236	25
Texas at Austin, University of	79,998	26

Virginia Tech Actual Salary Average Percentile **35th**

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[1] Average salary of peer institutions is based on the latest available data (Fall 2016) from IPEDS

Attachment B

2018-19 Pay Structure

Virginia Tech

	9-Month Faculty		12-Month Faculty		Distribution
	Entrance	Change	Entrance	Change	Approximate % of Total Faculty By Rank
Professor	$91,587	2%	$111,704	2%	30%
Associate Professor	70,049	2%	84,880	2%	27%
Assistant Professor	57,948	2%	70,486	2%	29%
Senior Instructor	49,699	2%	64,668	2%	3%
Advanced Instructor	44,310	2%	57,483	2%	2%
Instructor	40,613	2%	52,841	2%	9%

2018-19 Faculty Compensation Plan

June 4, 2018

DWIGHT SHELTON

INTERIM SENIOR VICE PRESIDENT FOR OPERATIONS AND ADMINISTRATION, VICE PRESIDENT FOR FINANCE AND CFO

VIRGINIA TECH™

2018-19 Faculty Compensation Plan Elements

- Authorized - Actual Salary Average
- 2018-19 pay structure
- Promotion and tenure process
- Annual evaluation and salary adjustment process
- Other salary adjustments
- Merit Review and Compensation Process

Peer Salary Benchmarking

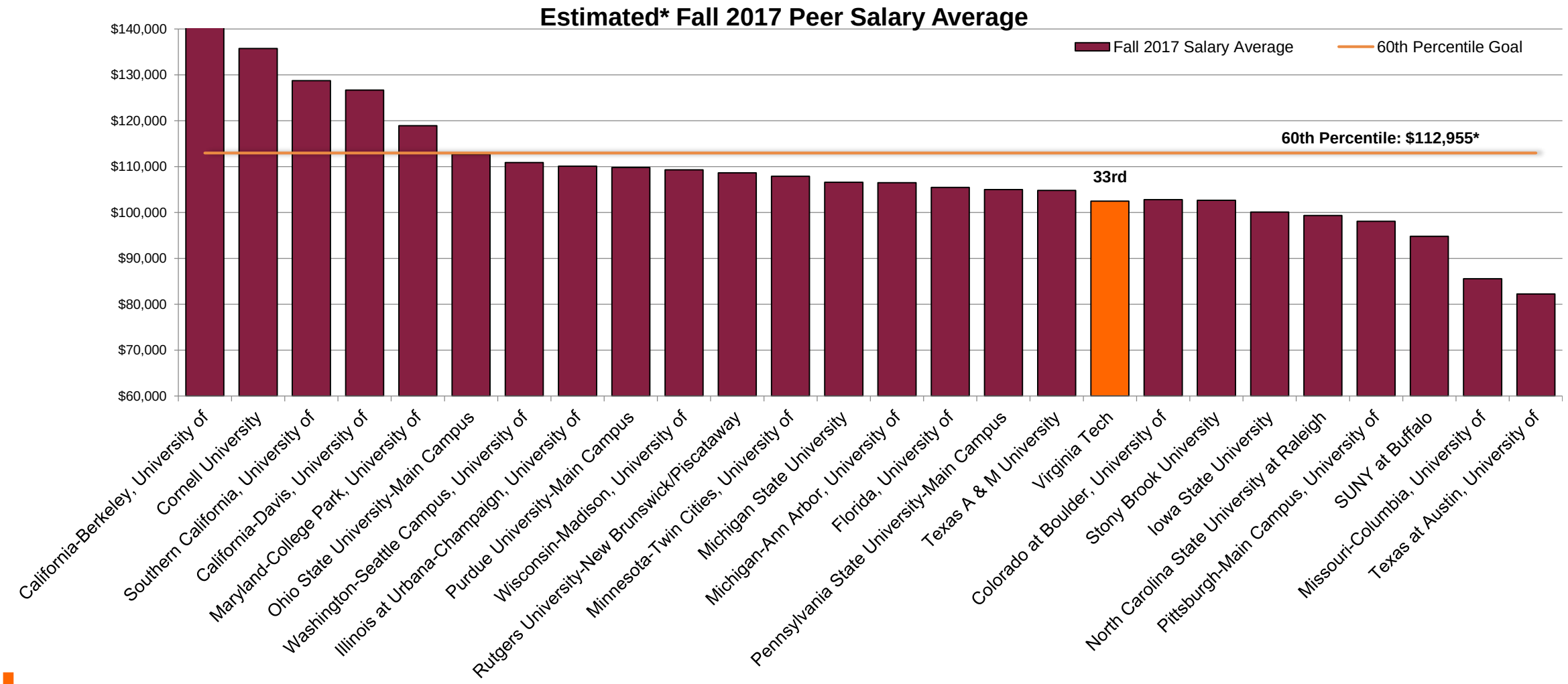
	Fall 2016	Fall 2017*	Change
60th Percentile IPEDS	$109,878	$112,955	2.8%
Actual Average Salary(a)	100,552	102,470	1.9%
Rank –– Actual	18 of 26	20 of 26	-2
Percentile –– Actual	35th	33rd	-2

**IPEDS peer salary data for Fall 2017 is not yet available. Estimates are based on the State Council of Higher Education's forecast of 2.8% salary escalation at peer institutions.*

(a) Computed in accordance with traditional consolidated salary average guidelines provided by the Secretary of Education.

If the market moves as forecast by SCHEV, the university's 2018-19 merit action (2%), P&T adjustments, and National Distinction program will likely maintain our current relative market position.

National Salary Benchmarking



**IPEDS peer salary data for Fall 2017 is not yet available. Estimates are based on the State Council of Higher Education's forecast of 2.8% salary escalation at peer institutions.*

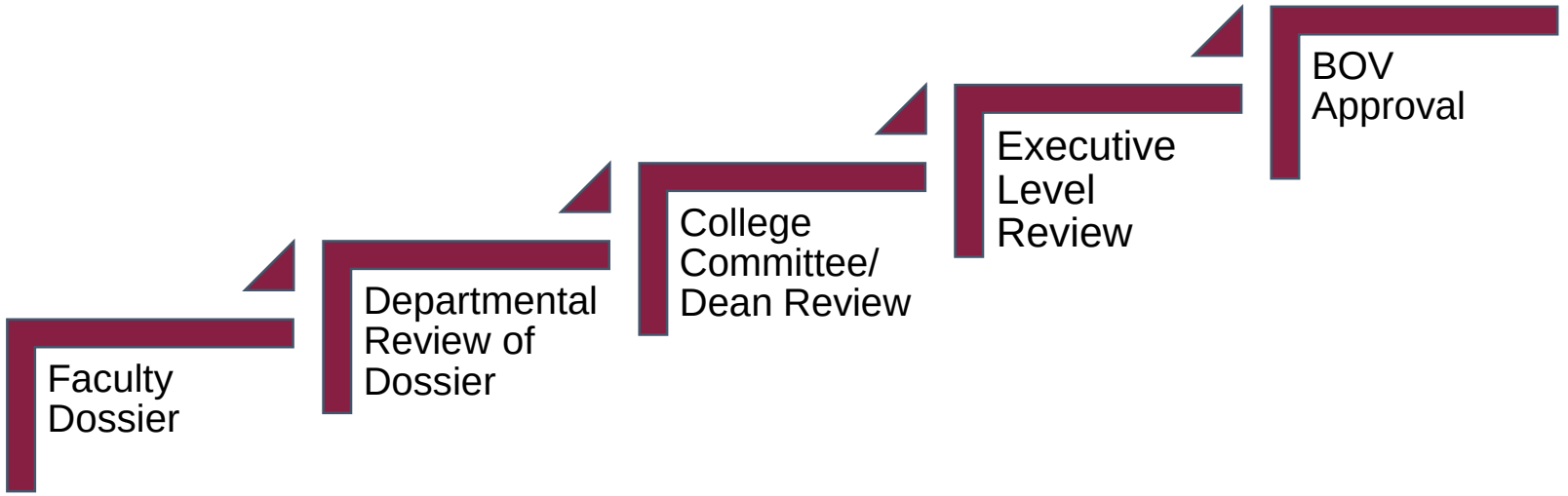
VIRGINIA TECH

2018-19 Pay Structure

- Establishes entrance salaries for each faculty rank
- Summarizes distribution of faculty across ranks

	9-Month Faculty	12-Month Faculty	Distribution of Approximate % of Total Faculty By Rank
	Entrance	Entrance	
Professor	$91,587	$111,704	30%
Associate Professor	70,049	84,880	27%
Assistant Professor	57,948	70,486	29%
Senior Instructor	49,699	64,668	3%
Advanced Instructor	44,310	57,483	2%
Instructor	40,613	52,841	9%

Promotion & Tenure



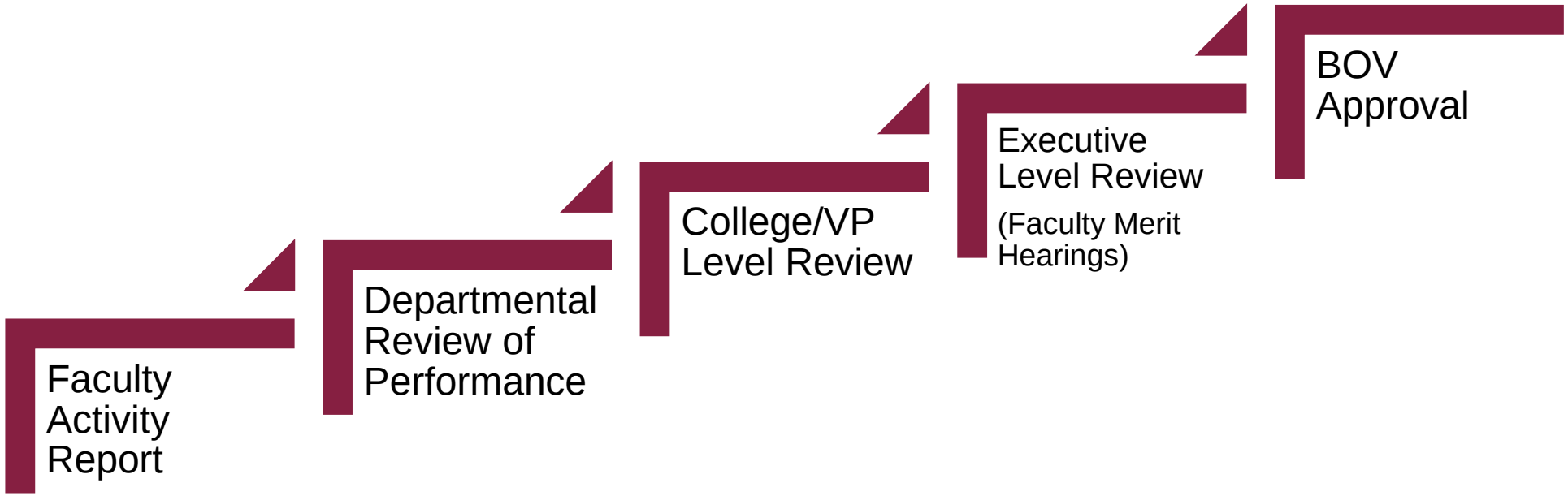
- Promotion to a higher rank and appointment with tenure may be granted to faculty members on a regular faculty appointment who have demonstrated outstanding accomplishments.
- Each candidate for promotion or tenure will be evaluated in light of the triple mission of the university: instruction, research, and outreach.

Annual Evaluation and Salary Adjustments

- Faculty Activity Report (FAR)
  - Teaching/Research Faculty: instructional activities, creative scholarship, outreach and service contributions and other professional activities and recognitions
  - Administrative/Professional faculty: activities in support of their specific job goals as they relate to the broader mission of the university
- FAR forms the basis of faculty evaluations conducted annually by departments independent of the faculty merit process

Annual Evaluation and Salary Adjustments

Faculty Merit Process



- Salary adjustments in the faculty merit process are based on performance, not automatic.
- All merit recommendations are reviewed at three levels before presenting to Board of Visitors for approval.

Merit Review and Compensation Process

- 2018-19 merit-based faculty salary program
  - 2.0% pool for faculty, allows Senior Management Area to supplement
  - Effective on September 10th (September 28th paycheck)
- Other adjustments may happen for:
  - Changes in duties and responsibilities
  - Recognition and retention
    - National Distinction
  - Special temporary assignments
- Off-cycle adjustments are submitted, appropriate, for ratification to the Board of Visitors on a quarterly basis on the Faculty Personnel Changes Report.

Summary & Recommendation

- University current ranks at 33rd percentile of peer salary average
- State has not proposed salary increase for 2018-19
- University annual merit process recommended to maintain and ultimately improve university standing among peers
  - 2.0% minimum, units may supplement
  - Other adjustments allowed due to National Distinction, retention, change of responsibilities

RECOMMENDATION:

That the proposed 2018-19 Faculty Compensation Plan be approved.

June 4, 2018

Additional Information

Promotion & Tenure

Faculty	Clinical Faculty	Collegiate Faculty	Professor of Practice	Instructor	Cooperative Extension	Amount (1)
Professor	Clinical Professor	Collegiate Professor	Professor of Practice			$7,000
Associate Professor	Clinical Associate Professor	Collegiate Associate Professor	Associate Professor of Practice	Senior Instructor	Senior Agent	$5,000
Assistant Professor	Clinical Assistant Professor	Collegiate Assistant Professor	Assistant Professor of Practice	Advanced Instructor	Agent	$3,000

(1) No change to amounts from 2016-17 Faculty Compensation Plan.

Approval of 2018-19 Auxiliary System Budgets

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 30, 2018

Virginia Tech has four master resolution bond covenants securing debt issues referred to as Systems. The four systems are the Athletic Facility System, Dormitory and Dining System, Electric Service Utility System, and the University Services System. The resolutions authorizing and securing each system requires the adoption of an annual budget by the Board of Visitors.

The budget presentation to the Board of Visitors provides documentation that the revenues to be received during the fiscal year will be sufficient to meet the operating costs of the System, the principal and interest requirements, and usual expenses of maintenance, repair, and operation. The annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the System during the fiscal year. The university works to ensure that the systems remain in good working order and that compliance with the terms and conditions of the bond covenants are maintained.

The budget of each of the four Systems for the 2018-19 fiscal year are attached. The system budgets are also included within the university's overall budget.

RECOMMENDATION:

That the recommended budget for fiscal year July 1, 2018 to June 30, 2019 for the operation of the Athletic Facility System, Dormitory and Dining System, Electric Service Utility System, and the University Services System be approved.

June 4, 2018

Dormitory and Dining Hall System
2018-19 Operating Budget

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 30, 2018

The resolution authorizing and securing the Dormitory and Dining Hall System revenue bonds requires the adoption of an annual budget by the Board of Visitors. The budget presentation to the Board of Visitors provides documentation that the revenues to be received during the fiscal year will be sufficient to meet the operating costs of the System, the principal and interest requirements, and usual expenses of maintenance, repair, and operation.

Subject to approval by the Board of Visitors, the annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the System during the fiscal year. In compliance with Section 5.1 and 5.5 of the resolution authorizing and securing the Dormitory and Dining Hall System revenue bonds, the estimate of the resources to be used for the operation of the System during the fiscal year July 1, 2018 to June 30, 2019 and a recommended budget of current expenses for the System for the same period are summarized below. The rates and charges for the next fiscal year are sufficient for the current expenses, debt service, and reserve requirements set forth in Section 5.1 of the resolution.

	Residential	Dining	Total
Estimated Revenues			
Student Fees	$55,033,012	$58,613,511	$113,646,523
Other Income	2,291,153	11,177,016	13,468,169
Total Revenues	$57,324,165	$69,790,527	$127,114,692
Current Expenses			
Personnel Services	$13,069,209	$26,367,519	$39,436,728
Operations	14,089,843	30,431,932	44,521,775
Administrative Charge	2,119,343	4,659,360	6,778,703
Maintenance Reserve	4,457,038	948,039	5,405,077
Debt Service	13,365,728	3,563,778	16,929,506
One-Time Projects	5,589,973	2,046,080	7,636,053
Total Expenses	$52,691,134	$68,016,708	$120,707,842
Reserve Contribution (Draw)	$4,633,031	$1,773,819	$6,406,850
Net	$0	$0	$0

Electric Service Utility System
2018-19 Operating Budget

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 30, 2018

The resolution authorizing and securing the Electric Service Utility System revenue bonds requires the adoption of an annual budget by the Board of Visitors. The budget presentation to the Board of Visitors provides documentation that the revenues to be received during the fiscal year will be sufficient to meet the operating costs of the System, the principal and interest requirements, and usual expenses of maintenance, repair, and operation.

Subject to approval by the Board of Visitors, the annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the System during the fiscal year. In compliance with Section 5.1 and 5.5 of the resolution authorizing and securing the Electric Service Utility System revenue bonds, the estimate of the resources to be used for the operation of the System during the fiscal year July 1, 2018 to June 30, 2019 and a recommended budget of current expenses for the System for the same period are summarized below. The rates and charges for the next fiscal year are sufficient for the current expenses, debt service, and reserve requirements set forth in Section 5.1 of the resolution.

Estimated Revenues	
Sales to University Departments	$21,683,983
All Other Sales	15,177,196
Investment Income	31,747
Total Revenues	$36,892,926
Current Expenses	
Personnel Services	$3,999,490
Purchase of Electricity	25,796,088
Operating Expenditures	4,759,951
Capital Maintenance Reserve Projects	860,000
Maintenance, Repairs and Equipment Replacement	497,890
Debt Service	769,507
Total Expenses	$36,682,926
Reserve Contribution (Drawdown)	$210,000
Net	$0

University Services System
2018-19 Operating Budget

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 30, 2018

The resolution authorizing and securing the University Services System* revenue bonds requires the adoption of an annual budget by the Board of Visitors. The budget presentation to the Board of Visitors provides documentation that the revenues to be received during the fiscal year will be sufficient to meet the operating costs of the System, the principal and interest requirements, and usual expenses of maintenance, repair, and operation.

Subject to approval by the Board of Visitors, the annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the System during the fiscal year. In compliance with Section 5.1 and 5.5 of the resolution authorizing and securing the University Services System revenue bonds, the estimate of the resources to be used for the operation of the System during the fiscal year July 1, 2018 to June 30, 2019 and a recommended budget of current expenses for the System for the same period are summarized below. The rates and charges for the next fiscal year are sufficient for the current expenses, debt service, and reserve requirements set forth in Section 5.1 of the resolution.

Estimated Revenues	
Student Fees	$44,723,118
Sales and Services	4,188,690
Other Income	2,654,614
Total Revenues	$51,566,422
Current Expenses	
Personnel Services	$24,607,255
Operating	14,449,734
Debt Service	4,495,541
Capital Maintenance Reserve	2,115,534
Non-Capital Maintenance Reserve	286,800
Student Organization Allocation	1,563,774
One-Time Expenses	3,324,016
Total Expenses	$50,842,654
Reserve Contribution (Drawdown)	$723,768
Net	$0

* University Services System includes Career and Professional Development, Center for the Arts, Health Services, Recreational Sports, Student Engagement and Campus Life, Student Organizations, and Rescue Squad.

University Services System
2018-19 Operating Budget

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 30, 2018

The resolution authorizing and securing the University Services System* revenue bonds requires the adoption of an annual budget by the Board of Visitors. The budget presentation to the Board of Visitors provides documentation that the revenues to be received during the fiscal year will be sufficient to meet the operating costs of the System, the principal and interest requirements, and usual expenses of maintenance, repair, and operation.

Subject to approval by the Board of Visitors, the annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the System during the fiscal year. In compliance with Section 5.1 and 5.5 of the resolution authorizing and securing the University Services System revenue bonds, the estimate of the resources to be used for the operation of the System during the fiscal year July 1, 2018 to June 30, 2019 and a recommended budget of current expenses for the System for the same period are summarized below. The rates and charges for the next fiscal year are sufficient for the current expenses, debt service, and reserve requirements set forth in Section 5.1 of the resolution.

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Total Expenses	$50,842,654
Reserve Contribution (Drawdown)	$723,768
Net	$0

* University Services System includes Career and Professional Development, Center for the Arts, Health Services, Recreational Sports, Student Engagement and Campus Life, Student Organizations, and Rescue Squad.

Athletic Facilities System
2018-19 Operating Budget

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 30, 2018

The resolution authorizing and securing the Athletic Facilities System revenue bonds requires the adoption of an annual budget by the Board of Visitors. The budget presentation to the Board of Visitors provides documentation that the revenues to be received during the fiscal year will be sufficient to meet the operating costs of the System, the principal and interest requirements, and usual expenses of maintenance, repair, and operation.

Subject to approval by the Board of Visitors, the annual budget will be the basis for making payments from the revenue fund to meet the operating costs of the System during the fiscal year. In compliance with Section 5.1 and 5.5 of the resolution authorizing and securing the Athletic Facilities System revenue bonds, the estimate of the resources to be used for the operation of the System during the fiscal year July 1, 2018 to June 30, 2019 and a recommended budget of current expenses for the System for the same period are summarized below. The rates and charges for the next fiscal year are sufficient for the current expenses, debt service, and reserve requirements set forth in Section 5.1 of the resolution.

Estimated Revenues	
Student Fees	$10,395,122
Sales and Services	61,501,046
Other Income	2,631,300
Total Revenues	$74,527,468
Current Expenses	
Personnel Services	$35,068,462
Operations	21,827,591
Administrative Charge	4,776,305
Capital Maintenance Reserve	1,512,189
Maintenance, Repairs, & Equipment Replacement	2,403,649
Debt Service	5,643,334
One-Time Projects	1,530,000
Total Expenses	$72,761,530
Reserve Contribution (Drawdown)	$1,765,938
Net	$0

2018-19 Auxiliary System Budgets

June 4, 2018

DWIGHT SHELTON

INTERIM SENIOR VICE PRESIDENT FOR OPERATIONS AND ADMINISTRATION, VICE PRESIDENT FOR FINANCE AND CFO

VIRGINIA TECH™

System Budget Overview

- Virginia Tech has four master resolution bond covenants securing debt issues referred to as Systems:
  - Dormitory and Dining System
  - University Services System
  - Athletic Facility System
  - Electric Service System
- The resolutions authorizing and securing each system requires the adoption of an annual budget by the Board of Visitors.

System Budget Overview

- Revenues are sufficient to meet the operating costs, the principal and interest requirements, and usual expenses of maintenance, repair, and operation.
- The University works to ensure that:
  - The systems remain in good working order
  - Compliance with the terms and conditions of the bond covenants are maintained

System Budgets

(dollars in millions)

	Dormitory & Dining	University Services	Athletic Facility	Electric Service
Revenues	$127.1	$51.6	$74.5	$36.9
Expenses	120.7	50.8	72.8	36.7
Contribution/(Draw)	$6.4	$0.8	$1.7	$0.2

Summary & Recommendation

- Revenues to be received during the fiscal year will be sufficient to meet:
  - The operating costs of the System
  - The principal and interest requirements
  - Normal expenses of maintenance, repair, and operation
  - Terms and conditions of bond covenants

RECOMMENDATION:

That the recommended budget for fiscal year July 1, 2018 to June 30, 2019 for the operation of the Athletic Facility System, Dormitory and Dining System, Electric Service Utility System, and the University Services System be approved.

June 4, 2018

Proposed 2018-19 Operating and Capital Budgets

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

May 17, 2018

Each June, the university provides the Board of Visitors with an overview of the operating and capital budgets for the upcoming fiscal year.

State Appropriations

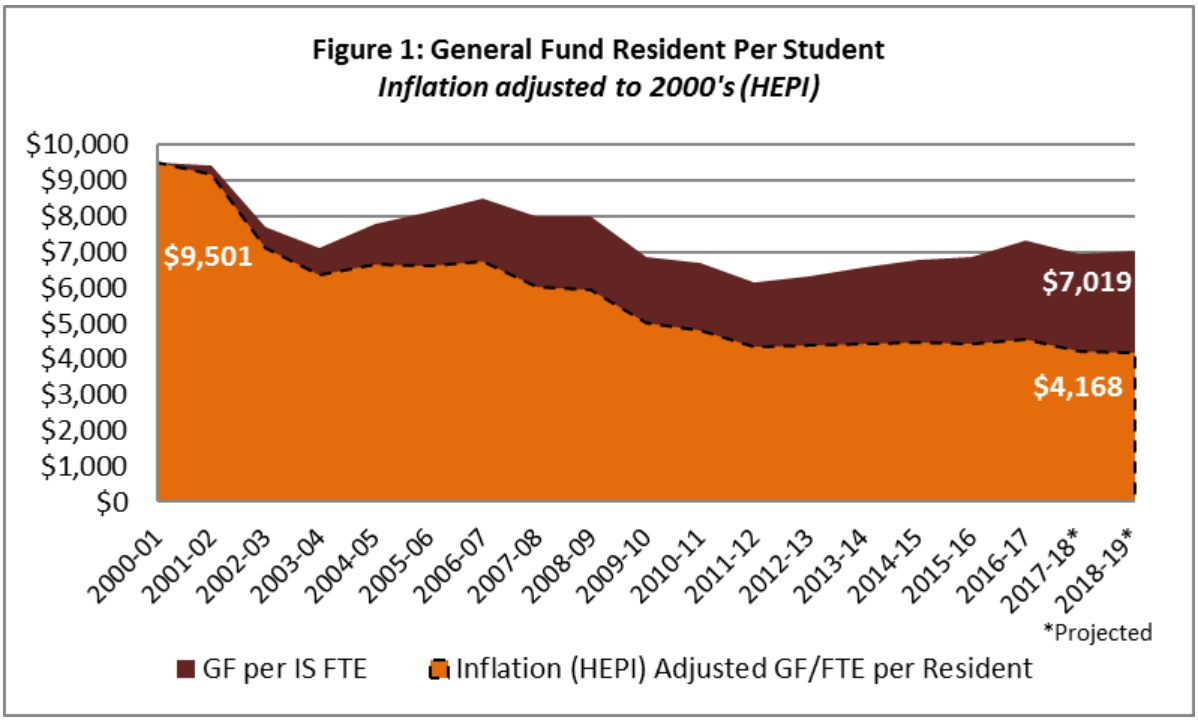
As of May 17, 2018, the 2018 General Assembly Session had not passed a final 2018-20 biennial budget. Called back into a Special Session on April 11th, the legislature continues to deliberate the commonwealth's biennial budget. Though no final state budget is available, the university has moved forward with the development of its 2018-19 operating and capital budget utilizing a conservative estimate of the state funding support for the university in 2018-19. Once the state completes the 2018-20 biennial budget and the university understands the actual 2018-19 level of General Fund support, the university's internal forecast will be updated and revised accordingly.

Virginia Tech anticipates an initial state authorization of $1.5 billion for fiscal year 2018-19 to carry out all of its programs, based on the forecast of direct appropriations to the university. However, the annual internal budget varies from this external expenditure authorization for several reasons, some of which increase the annual expenditure authority while others reduce the expenditure plans. For example, the university's expenditure authorization will be adjusted during 2018-19 when the state allocates the Central Appropriation funding for the state share of fringe benefit rate changes. Additionally, under the sum sufficient authority granted as part of restructuring, nongeneral fund appropriations may be established as needed by the institution.

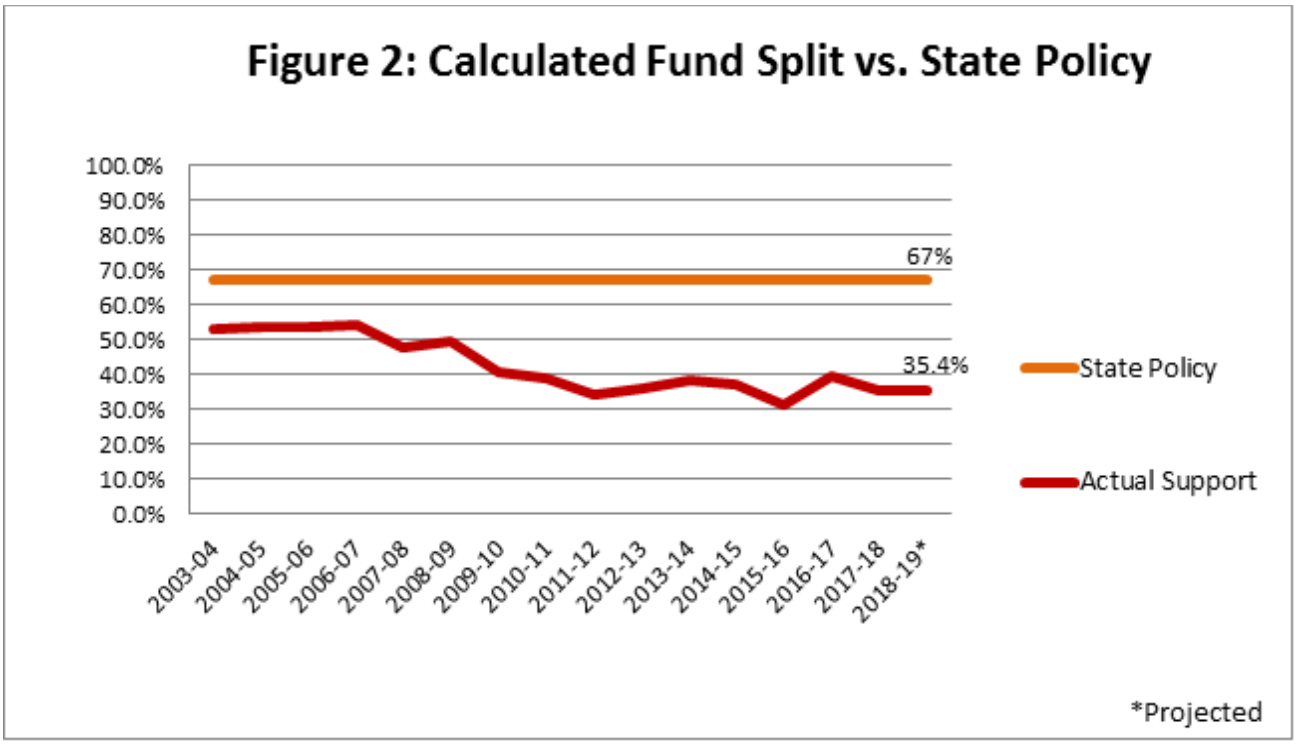
Forecast of State Budget Revenue Changes

For 2018-19, the university forecasts an incremental increase in General Fund appropriation of $3.3 million from the adjusted 2017-18 budget. This is comprised of an estimated General Fund increase of $2.4 million for Educational and General programs in the University Division (Agency 208), an estimated increase of $0.6 million for the land-grant programs in the Cooperative Extension and Agricultural Experiment Station (Agency 229) and an increase of $0.2 million for Student Financial Aid. As shown in Table 2 on page 5, the General Fund increase for the University Division includes changes in direct appropriations and the university estimate of Central Appropriation fund transfers during the fiscal year. State support includes the state's share of the continuation of the 2017-18 faculty and staff salary increases, estimated funding for the restoration of interest earnings and credit card rebate, and the state's share of the fringe benefit rate increases. The details of the state support are described further in each budget section.

With these state resources, the state support per Virginia student will remain stable in 2018-19. Unfortunately, total state support per Virginia student for 2018-19 is projected to be 26 percent below the funding provided in 2001. The university enrolls over 4,000 additional Virginia undergraduates as compared to fall 2004, a figure projected to grow to over 4,400 in fall 2018. Inflation adjusted, the university will receive 55 percent less General Fund support per student than in fiscal year 2001, as seen in Figure 1. It is important to note that this analysis presents the state support in the most favorable light since it includes all General Fund resources allocated to E&G, including support for activities beyond instruction such as research and public service. Figure 1 below is presented in this manner because it is a commonly utilized perspective by external groups.

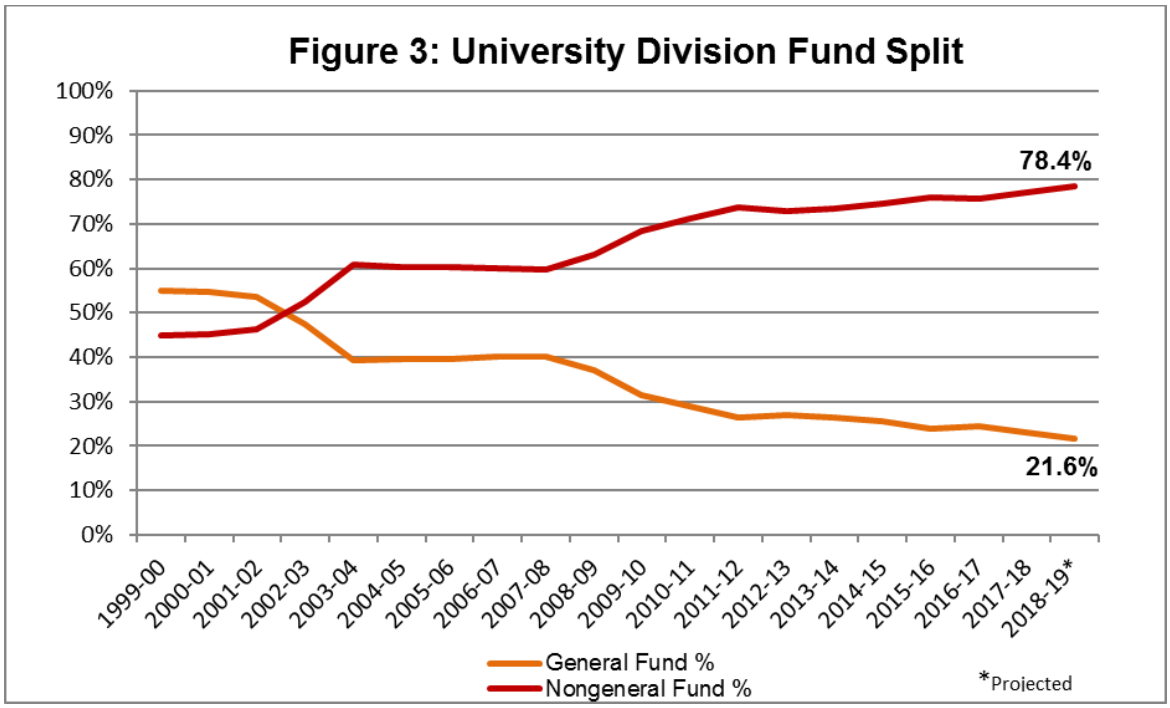


The state policy for funding higher education is to fund 67 percent of the cost of education of each Virginia resident at the institution. Figure 2 below displays the status of actual funding for instruction in relation to this policy over time. In 2018-19, the state will provide an estimated 35.4 percent of this cost. In response, the university has worked to reduce costs and streamline operations, but the shortfall in General Fund support has also created pressure to grow nongeneral fund resources.



Proposed Budgets for 2018-19

For 2018-19, the recommended internal budget for all operations is $1.6 billion. This is an increase of $34.5 million, approximately 2.3 percent, over the adjusted 2017-18 budget. This increase reflects changes in nongeneral fund revenues for 2018-19 and forecasted conservative estimates of the outcome of the 2018 General Assembly session that will impact the 2018-19 General Fund appropriation. The overall change includes an increase of $45.7 million attributable to the Educational and General program and $10.2 million of projected growth in auxiliary enterprises. The total General Fund allocation is estimated to be approximately $265.4 million, an increase of $3.3 million from the 2017-18 adjusted budget. General Fund revenues will provide $241.4 million in support for the instructional, research, and extension programs, $21.7 million for student financial assistance, and $2.3 million for the Unique Military Activities program. As shown in Figure 3 below, the General Fund appropriation represents 21.6 percent of the University Division's Educational and General budget (as compared to 53.6 percent in the 2001-02 budget) and 17.0 percent of the total budget. (See Schedule 1)



Schedule 1 displays the proposed operating budgets for 2018-19, by major program and revenue and expense category. Schedule 2 is an expansion of the projected auxiliary operations budgets, categorized by major activity. These schedules also display the 2017-18 budget, as approved in June 2017, and the current adjusted 2017-18 budget for comparison purposes. This report provides a brief discussion of the changes in the operating budget for each of the major programs.

Educational and General

The university's Educational and General budget will be $849.2 million in 2018-19. The Educational and General budgets for the University Division (Agency 208) and the Cooperative Extension/Agricultural Experiment Station Division (Agency 229) are presented below by source of funding.

	(Dollars in Thousands)		
	University Division	CE/AES Division	Total
Educational and General Budget			
General Fund	$164,427	$71,603	$236,030
Tuition and Fees	552,081	0	552,081
Federal Funds	0	15,640	15,640
Other	44,529	880	45,409
Total Educational and General	$761,037	$88,123	$849,160
Percent of Total			
General Fund	21.6%	81.3%	27.8%
Tuition and Fees	72.5%	0.0%	65.0%
Federal Funds	0.0%	17.7%	1.9%
Other	5.9%	1.0%	5.3%
Total Percentage	100.0%	100.0%	100.0%

The year-to-year comparison of the budget in Schedule 1 shows an overall revenue increase in the Educational and General program of $45.7 million, or 5.7 percent, over the adjusted 2017-18 budget.

The 2018-19 operating and capital budgets have been developed utilizing the forecasted state funding support for the university in 2018-19. The university forecasts the following changes:

	(Dollars in Millions)			
	University Division	CE/AES Division	Total	
Change in General Fund Support:				
Continuation of 2017-18 Salary Program	0.3	0.1	0.4	
Restoration of Interest Earnings and Rebates	0.7	0.0	0.7	*,**
Prospective Fringe Benefit Rate Changes	1.4	0.5	1.9	**
Total General Fund Change	2.4	0.6	3.0	

*Forecasted outcome of General Assembly.

**Estimate. These items are funded centrally by the state at a later date.

The percentage of the Educational and General budget for the University Division provided by the General Fund decreased from 22.6 percent in the 2017-18 adjusted budget to 21.6 percent in 2018-19.

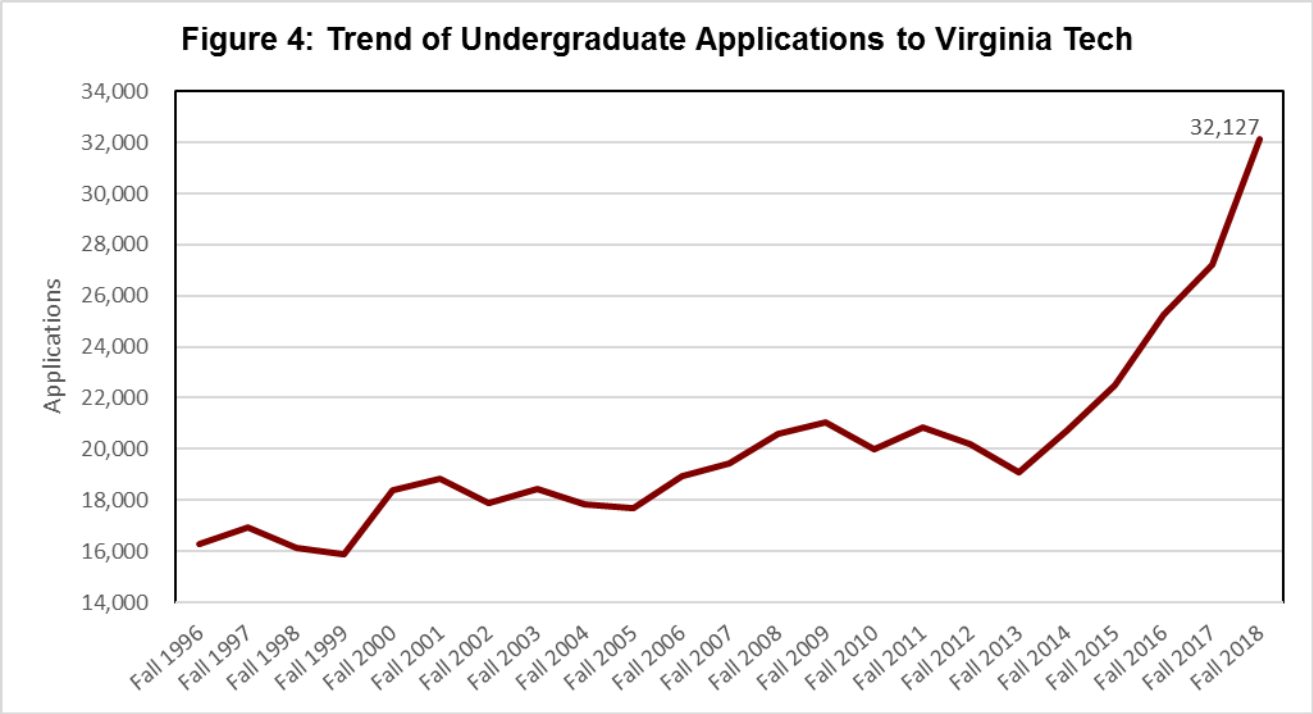
The 2018-19 tuition and fee budget increased by $36.4 million, or 7.1 percent, over the adjusted 2017-18 budget. The difference in the tuition and fee budget reflects strategic undergraduate enrollment growth, Virginia Tech Carilion School of Medicine integration, increase in the tuition rates (approved by the Board of Visitors in March) including Veterinary Medicine, specialized program fees, immigration services fee, the technology

fee and the library fee. The increase also includes unfunded and tuition funded scholarships to student aid programs, and adjustments to the other E&G fee budgets. Unfunded scholarships support both undergraduate need based aid and a portion of the graduate tuition remission program. Tuition and Fee funded scholarships are targeted to support the institution's strategic priorities, including enrollment growth. Additionally, the revenue from the Facility and Equipment fee will be transferred to the Commonwealth for debt service on new facilities and equipment; thus, it is not reflected in the net revenue total.

Of the $36.4 million increase in the tuition and fee budget in 2018-19, $7.3 million is attributable to the July 1, 2018 integration of the Virginia Tech Carilion School of Medicine (VTCSOM) as the ninth college of Virginia Tech. Consistent with the resolution to acquire and integrate the Virginia Tech Carilion School of Medicine as approved in November 2017, the university has ratified the tuition rate established by the VTCSOM board and has reviewed the VTCSOM budget with Carilion Clinic. The 2018-19 investments by the partners include contributions of $3.4 million from Carilion Clinic and $3.4 million of investment income from Virginia Tech. Revenue from additional miscellaneous sources totals $0.6 million. These resources comprise the 2018-19 Virginia Tech Carilion School of Medicine budget of $14.7 million.

Enrollment Growth

The university is experiencing a significant increase in student demand. Undergraduate applications once again reached a new high for fall 2018, increasing 18.0 percent from the previous year. Demand is broad-based and includes several areas where Virginia Tech is in a strong or unique position to provide additional access to qualified students. To meet demand for undergraduate enrollment, particularly in the STEM-H disciplines, the university is planning the strategic addition of undergraduates for 2018-19. Figure 4 below illustrates the historical trend in undergraduate applications.



Auxiliary Enterprises

The total 2018-19 auxiliary revenue budget is $351.5 million, a growth of $10.2 million or 3.0 percent over the adjusted 2017-18 budget, with a significant portion of the increase attributable to growth in Residential and Dining Programs, Student Health Services, Transportation, Career and Professional Development, Telecommunications Services, and Electric Service. This increase includes resources to cover proposed changes in compensation and fringe benefit rate changes, enrollment growth, enhancements to student health and counseling services, student programming, wireless network equipment renewal, enhanced transit services, increased energy costs, maintenance of existing facilities, and the cost of new facilities.

Financial Assistance for Educational and General Programs

The projected annual budget for Financial Assistance for Educational and General Programs is $322.1 million, a decrease of $22.8 million or 6.6 percent less than the adjusted 2017-18 budget. The budget was reduced to better align the 2018-19 budget with the projected federal sponsored program activity. This budget is comprised primarily of sponsored program activities but also includes the Eminent Scholars program, the Enterprise Fund for distance and distributed learning, and the Commonwealth's General Fund support for research. The most significant activity in this category is externally sponsored research. The General Fund support of $5.4 million for research is forecasted to remain unchanged in 2018-19. Although Sponsored Programs activity is anticipated to grow over 2017-18 actuals, the 2018-19 budget can accommodate the growth while technically realigning the budget for optimistic forecasts in prior fiscal periods.

Appropriated Student Financial Assistance

The projected annual 2018-19 budget for the Student Financial Assistance program is $30.2 million, a growth of $3.6 million over the adjusted 2017-18 budget. This budget includes forecasted increase of $0.2 million in state General Fund support for Undergraduate Scholarships, Graduate Fellowships, Soil Scientist Scholarships, Virginia Military Survivors and Dependents, Two–Year College Transfer Grant and the Multicultural Academic Opportunity Program to a total projected $21.7 million General Fund student financial aid budget in 2018-19. This budget also includes an increase of $3.4 million in the annual nongeneral fund student financial assistance budget to a total projected nongeneral fund student financial aid budget of $8.5 million in 2018-19. The university plans to utilize the nongeneral fund student financial assistance to advance strategic initiatives such as access and enrollment growth.

All Other Programs

The All Other Programs component is comprised of the Unique Military Activities appropriation, surplus property, federal work study program, and local funds. The annual budget for these funds is based on historic trends and projections of activity levels by program managers. These programs are funded by resources that are designated for specific purposes. The General Fund support for Unique Military Activities is forecasted to remain constant in 2018-19 at $2.3 million. For All Other Programs, the recommended budget is $7.3 million, and reflects a decrease of $2.3 million over the adjusted budget for 2017-18.

Planned Change in Reserves

Existing state requirements, along with the university's budgeting and financial management strategies, generally result in the establishment of breakeven budgets for the major budget components, with the exception of auxiliary enterprises. That is the case for 2018-19, where only the auxiliary budgets project an addition to the reserves as of June 30, 2019. The projected addition of $12.8 million is the result of the intentional rebuilding of reserves in specific auxiliaries where expenditures in prior years created the need for restoring the reserves so that it may operate as a revolving fund. In other cases, the projected addition to reserves reflects the temporary positive impact of planning activities for new capital projects. The 2018-19 budget for auxiliary enterprises is also designed to ensure that the reserve levels remain in compliance with the tenets of bond covenants as well as SCHEV reserve targets.

Compensation Plan

Contingent upon funding availability and approval of the 2018-19 operating budget, the university plans to implement faculty and university staff merit programs for fiscal year 2018-19. The attached operating budget includes funding, consistent with traditional funding principles, for the following proposed employee compensation actions:

- 2.00 percent faculty merit compensation program.

- 2.00 percent university staff compensation program. The university will provide an opportunity for the state classified staff to convert to university staff and gain eligibility for the university staff merit process. Classified staff are defined as staff members hired before July 1, 2006 who have not subsequently converted to the university staff system.

- As reviewed at the March 2018 Board of Visitors meeting, a National Distinction program is planned for 2018-19 to allow the university to proactively address salary amounts, as a retention strategy, for faculty members that have achieved national distinction and excellence in their field and provide valuable contributions to the university. The ability to allocate any resources to fund this additional compensation program will be determined based on the results of the General Assembly Session and whether the university can identify any additional resources as it completes the budget development work. If funded, it is expected that the adjustments will be limited in the number of faculty included yet meaningful in size.

If the state authorizes a salary or a bonus program for fiscal year 2018-19, the university will redesign the merit programs in light of the new authorization and proceed accordingly.

Budget Allocations

The process of finalizing the 2018-19 operating budget allocations for the colleges and major operating units is currently underway. This process will be completed during June 2018 and issued to the university community by the Vice President for Finance and Chief Financial Officer. The Office of Budget and Financial Planning will allocate these budgets to the colleges and vice presidential areas in time for the departments to open the new fiscal year with the allocations in place in the university accounting system. The university develops the annual budget as a one-year quantification of the university's strategic plan. The strategic plan is the framework for enacting the university's mission.

Capital Outlay Projects

Virginia Tech's capital outlay program includes projects for the University Division and the Cooperative Extension/Agricultural Experiment Station Division. Initiation of a capital project requires authorization of a budget and funding sources from the state or the Board of Visitors.

The state appropriates projects supported entirely or partially with General Fund revenues. The university requests General Fund appropriations for new projects as part of the state capital budget cycle. If appropriated, these projects normally become effective and are added to the program at the beginning of a fiscal year.

Under the restructuring legislation and the 2006 Management Agreement between the Commonwealth and the university, the Board of Visitors has the authority to authorize capital projects funded entirely with nongeneral fund resources. New projects approved by the Board of Visitors become effective upon approval of a university resolution and are reflected on the subsequent Financial Performance Report.

The university develops a financing plan to support the entire budget of each capital project prior to its initiation. Upon initiation, the whole project budget is entered in the accounting system. The revenues to support capital expenditure budgets are a mix of state support, university supported debt, and self-generated cash resources including private gifts. When projects have multiple sources of funding, the university generally utilizes the resources in the following order: state support, bond proceeds, and then cash. This order allows the most effective use of the university's nongeneral fund resources.

The typical project lifespan is two to four years, and a refined level of precision is needed to optimize resource management. Cash flow models are used to predict the pace of spending by month for each project for its anticipated life. This analysis is then used to plan the timing to move each resource to a project budget on an as needed basis. Under this approach, project resources are held in their most productive location for as long as possible to maximize earnings. This analysis is further used to optimize the timing for external debt issuances to manage exposure to the cost of capital.

Each active capital project is included on the Financial Performance Report for its entire fiscal life and until all its funds in the accounting system are terminated. A project is removed from the Financial Performance Report at the end of the fiscal year it closes.

The portfolio of the capital outlay program for 2018-19 is comprised of 11 Educational and General projects and 11 Auxiliary Enterprise projects for a total of 22 projects. As part of the resource management process, each project has an annual budget. Schedule 3 lists the projects by major program and major phase of progress. Each project for 2018-19 is listed with the total project authorization by revenue source, total expenditures incurred from project inception to fiscal year 2017-18, available balance for 2018-19, annual budget for 2018-19, and balance at the close of 2018-19. The accuracy of annual budgets, and the cash flows models on which they are based, are most sensitive to construction start dates. For example, a large project that starts construction three months later than expected may be several million dollars underspend for the year. The total capital program for 2018-19 includes approximately $593 million of authorizations with an estimated annual budget of approximately $125 million.

RECOMMENDATION:

That the proposed 2018-19 operating and capital budgets, as displayed on Schedules 1, 2, and 3, be approved.

June 4, 2018

TOTAL OPERATING BUDGET FOR VIRGINIA TECH

Fiscal Year 2018-19

(Dollars in Thousands)

	2017-18 Original Budget	2017-18 Adjusted Budget	2018-19 Recommended Budget
Revenues			
Educational and General			
University Division			
General Fund	$161,675	$161,994	$164,427
Tuition and Fees	501,950	515,714	552,081
All Other Income	39,349	37,867	44,529
Subtotal	702,974	715,574	761,037
CE/AES Division			
General Fund	70,961	71,007	71,603
Federal Funds	15,640	15,740	15,640
All Other Income	880	1,120	880
Subtotal	87,481	87,867	88,123
Total Educational and General	$790,455	$803,441	$849,160
Auxiliary Enterprises	$333,313	$341,265	$351,498
Financial Assistance for E&G Programs (a)			
General Fund	5,389	5,389	5,389
Nongeneral Fund	338,785	339,490	316,714
Total	$344,174	$344,879	$322,103
Student Financial Assistance			
General Fund	21,273	21,455	21,692
Nongeneral Fund	4,267	5,165	8,546
Total	$25,540	$26,620	$30,238
All Other Programs (b)			
General Fund (UMA)	2,284	2,284	2,284
Nongeneral Fund	5,115	7,295	5,021
Total	$7,399	$9,579	$7,305
Total	$1,500,881	$1,525,785	$1,560,303
Expense			
Educational and General			
University Division	$702,974	$715,574	$761,037
CE/AES Division	87,481	87,867	88,123
Subtotal	790,455	803,441	849,160
Auxiliary Enterprises	326,617	368,248	338,733
Financial Assistance for E&G Programs (a)	344,174	344,879	322,103
Student Financial Assistance	25,540	26,620	30,238
All Other Programs (b)	7,399	10,034	7,305
Total	$1,494,185	$1,553,221	$1,547,538
Planned Change in Reserve			
Reserve Drawdown/(Deposit) (c)	(6,696)	27,437	(12,765)
Net	$0	$0	$0

(a) Financial Assistance for E&G Programs includes Sponsored Programs, the Eminent Scholars Program, and General Fund Research Initiative.

(b) All Other Programs include Unique Military Activities, Surplus Property, Local Funds, Federal Work Study, and Alumni Affairs.

(c) Reserve contributions are based on the budget plans of Auxiliary Enterprise units.

Presentation Date: June 4, 2018

TOTAL OPERATING BUDGETS FOR AUXILIARY ENTERPRISES
Fiscal Year 2018-19
(Dollars in Thousands)

	2017-18 Original Budget	2017-18 Adjusted Budget	2018-19 Recommended Budget
Residence and Dining Hall System*			
Revenues	$120,157	$122,539	$127,115
Expenses	-117,364	-124,296	-120,708
Reserve Drawdown/(Addition)	-2,793	1,757	-6,407
Net	$0	$0	$0
Parking and Transportation			
Revenues	$13,704	$13,903	$15,061
Expenses	-13,266	-13,854	-14,485
Reserve Drawdown/(Addition)	-438	-49	-576
Net	$0	$0	$0
Telecommunications Services			
Revenues	$22,087	$22,087	$22,551
Expenses	-23,161	-24,700	-22,299
Reserve Drawdown/(Addition)	1,074	2,613	-252
Net	$0	$0	$0
University Services System*			
Revenues	$48,521	$48,531	$51,566
Expenses	-47,655	-49,919	-50,843
Reserve Drawdown/(Addition)	-866	1,388	-723
Net	$0	$0	$0
Intercollegiate Athletics*			
Revenues	$69,283	$76,039	$74,527
Expenses	-68,903	-77,079	-72,762
Reserve Drawdown/(Addition)	-380	1,040	-1,765
Net	$0	$0	$0
Electric Service System*			
Revenues	$36,061	$34,720	$36,893
Expenses	-35,531	-34,562	-36,683
Reserve Drawdown/(Addition)	-530	-158	-210
Net	$0	$0	$0
Inn at Virginia Tech and Skelton Conference Center			
Revenues	$11,855	$12,337	$12,000
Expenses	-11,799	-12,299	-12,170
Reserve Drawdown/(Addition)	-56	-38	170
Net	$0	$0	$0
Other Enterprise Functions			
Revenues	$11,645	$11,109	$11,785
Expenses	-8,938	-31,539	-8,783
Reserve Drawdown/(Addition)	-2,707	20,430	-3,002
Net	$0	$0	$0
TOTAL			
Revenues	$333,313	$341,265	$351,498
Expenses	-326,617	-368,248	-338,733
Reserve Drawdown/(Addition)	-6,696	26,983	-12,765
Net	$0	$0	$0

* University Systems include Dormitory and Dining Hall System, University Service System, Intercollegiate Athletics System, and Electric Service System. The University Service System includes Health Services, Career Services, Student Engagement & Campus Life, Recreational Sports, Center for the Arts, Student Organizations and VT Rescue Squad.

Presentation Date: June 4, 2018

Schedule 3

EDUCATIONAL AND GENERAL CAPITAL PROJECT AUTHORIZATIONS FOR FISCAL YEAR 2019

(Dollars in Thousands)

as of April 30, 2018

	TOTAL PROJECT AUTHORIZATION							
	STATE SUPPORT	NONGENERAL FUND	AGENCY DEBT	TOTAL	ESTIMATED TOTAL EXPENSES June 30, 2018	ESTIMATED BALANCE AVAILABLE FOR FY2019	**ESTIMATED ANNUAL BUDGET FY2019**	ESTIMATED BALANCE AT CLOSE OF FY2019
Educational and General Projects								
Design Phase								
Improve Kentland Facilities	$ 9,363	$ -	$ -	$ 9,363	$ 1,125	$ 8,238	**$ 5,000**	$ 3,238
Agriculture Production Facilities	22,136	-	-	22,136	406	21,730	**1,800**	19,930
Chiller Plant Phase II	31,024	-	9,797	40,821	1,687	39,134	**4,200**	34,934
Holden Hall Renovation	44,386	-	17,500	61,886	2,400	59,486	**3,000**	56,486
Gas-Fired Boiler at the Central Steam Plant	-	6,800	-	6,800	100	6,700	**3,500**	3,200
Planning: Undergraduate Science Laboratory Building	-	3,084	-	3,084	1,000	2,084	**1,400**	684
Planning: Intelligent Infrastructure and Construction Com	-	6,000	-	6,000	480	5,520	**1,400**	4,120
Construction Phase								
Maintenance Reserve	15,530	-	-	15,530	-	15,530	**12,000**	3,530
Academic Buildings Renewal	35,029	-	-	35,029	22,600	12,429	**11,000**	1,429
Renovate Undergraduate Science Laboratories	-	10,000	-	10,000	2,300	7,700	**5,000**	2,700
Health Sciences & Technology	48,307	17,765	23,793	89,865	10,200	79,665	**33,000**	46,665
Close-Out								
Fire Alarm Systems and Access	4,891	0	0	4,891	3,380	1,511	**1,511**	0
Total Educational and General Projects	$ 210,666	$ 43,649	$ 51,090	$ 305,405	$ 45,678	$ 259,727	**$ 82,811**	$ 176,916

Presentation Date: June 4, 2018

AUXILIARY ENTERPRISE CAPITAL PROJECT AUTHORIZATIONS FOR FISCAL YEAR 2019

(Dollars in Thousands)

as of April 30, 2018

	TOTAL PROJECT AUTHORIZATION							
	STATE SUPPORT	NONGENERAL FUND	AGENCY DEBT	TOTAL	ESTIMATED TOTAL EXPENSES June 30, 2018	ESTIMATED BALANCE AVAILABLE FOR FY2019	**ESTIMATED ANNUAL BUDGET FY2019**	ESTIMATED BALANCE AT CLOSE OF FY2019
Auxiliary Enterprises Projects								
Design Phase								
Student Wellness Improvements	$ -	$ 6,010	$ 56,990	$ 63,000	$ 2,785	$ 60,215	**$ 5,000**	$ 55,215
Creativity & Innovation District Residence Hall	-	-	26,818	26,818	1,500	25,318	**3,000**	22,318
Dietrick First Floor and Plaza Renovation	-	5,000	2,000	7,000	500	6,500	**6,000**	500
Student-Athlete Performance Center	-	15,165	-	15,165	250	14,915	**1,600**	13,315
Commonwealth Ballroom Improvements	-	3,246	-	3,246	200	3,046	**2,500**	546
Construction Phase								
Maintenance Reserve	-	7,200	-	7,200	-	7,200	**7,200**	-
Lane Substation Expansion	-	2,000	4,500	6,500	4,727	1,773	**1,500**	273
ACC Network Studio	-	-	10,000	10,000	250	9,750	**7,500**	2,250
Close-Out								
Upper Quad Residential Facilities	-	35,671	53,729	89,400	87,764	1,636	**1,636**	-
O'Shaughnessy Renovation	-	8,867	12,633	21,500	18,231	3,269	**3,269**	-
Athletic Facilities Improvements	-	37,500	-	37,500	34,450	3,050	**3,050**	-
Total Auxiliary Enterprise Projects	$ -	$ 120,659	$ 166,670	$ 287,329	$ 150,657	$ 136,672	**$ 42,255**	$ 94,417
GRAND TOTAL ALL CAPITAL PROJECTS	$ 210,666	$ 164,308	$ 217,760	$ 592,734	$ 196,335	$ 396,399	**$ 125,066**	$ 271,333

Presentation Date: June 4, 2018

2018-19 Operating and Capital Budgets

June 4, 2018

DWIGHT SHELTON

INTERIM SENIOR VICE PRESIDENT FOR OPERATIONS AND ADMINISTRATION, VICE PRESIDENT FOR FINANCE AND CFO

VIRGINIA TECH™

Operating Budget

2018-19 Operating Budget

($ in Millions)

	2017-18 Adjusted Budget	2018-19 Proposed Budget	Change $	Change %
Educational and General				
University Division	$715.6	$761.0	$45.4	6.3%
Coop Ext/Ag Experiment	87.9	88.1	0.3	0.3%
Subtotal	**$803.4**	**$849.2**	**$45.7**	**5.7%**
Auxiliary Enterprises	$341.3	$351.5	$10.2	3.0%
Sponsored Programs	344.9	322.1	(22.8)	-6.6%
Financial Aid (Appropriated)	26.6	30.2	3.6	13.5%
UMA and Other Activities	9.6	7.3	(2.3)	-24.0%
Total	**$1,525.8**	**$1,560.3**	**$34.5**	**2.3%**

Note: Dollars shown in millions for display purposes. Due to rounding, numbers presented in table above and throughout presentation may not add up precisely to the totals provided.

2018-19 Annual Change in University Division – Educational and General Budget

($ in Millions)

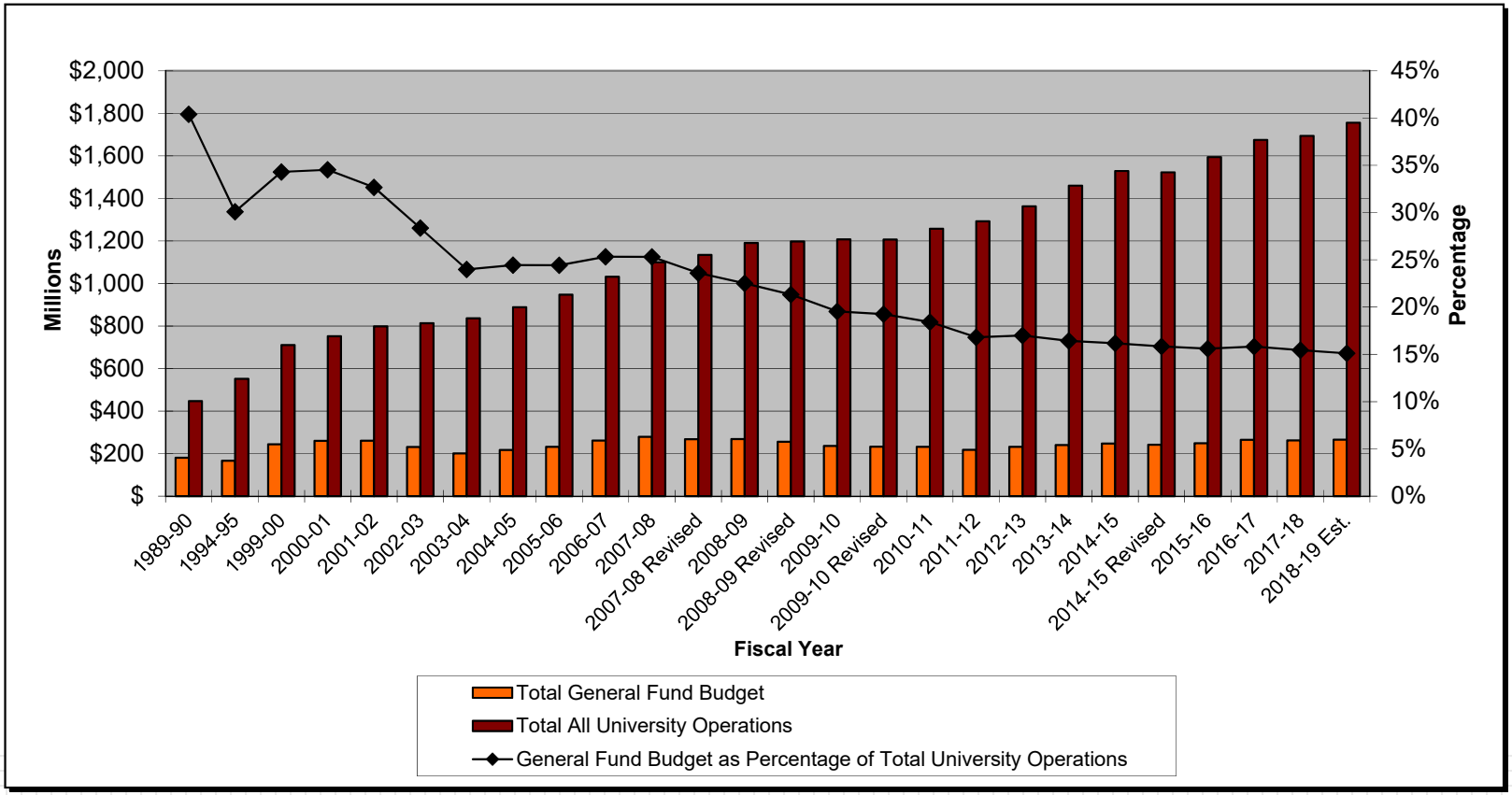
	2017-18 Adjusted Budget	2018-19 Proposed Budget	Change $	Change %
University Division (E&G)				
General Fund	$162.0	$164.4	$2.4	1.5%
Tuition and Fees	515.7	552.1	36.4	7.1%
All Other Income	37.9	44.5	6.6	17.4%
Subtotal	**$715.6**	**$761.0**	**$45.4**	**6.3%**

2018-19 Components of Financial Assistance for E&G Programs

($ in Millions)

	2017-18 Adjusted Budget	2018-19 Proposed Budget	Change $	Change %
General Fund	$5.4	$5.4	$0.0	0.0%
Nongeneral Fund				
Sponsored Grants and Contracts	268.1	239.0	(29.1)	-10.9%
Other	71.4	77.8	6.4	8.9%
Subtotal	**$344.9**	**$322.1**	**(22.8)**	**-6.6%**

Historical General Fund Support Percentages



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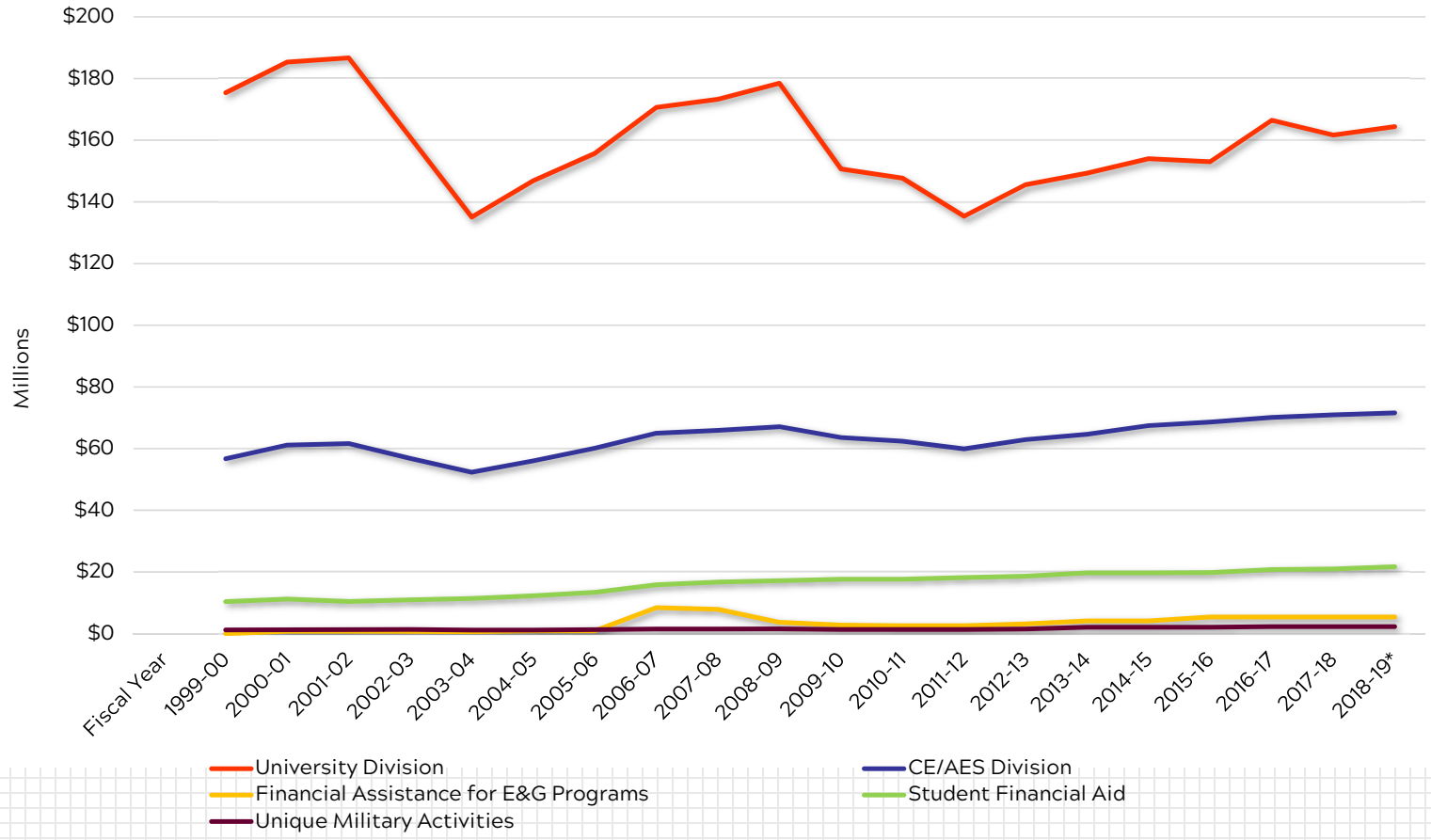
General Fund Support by Program



*Projected

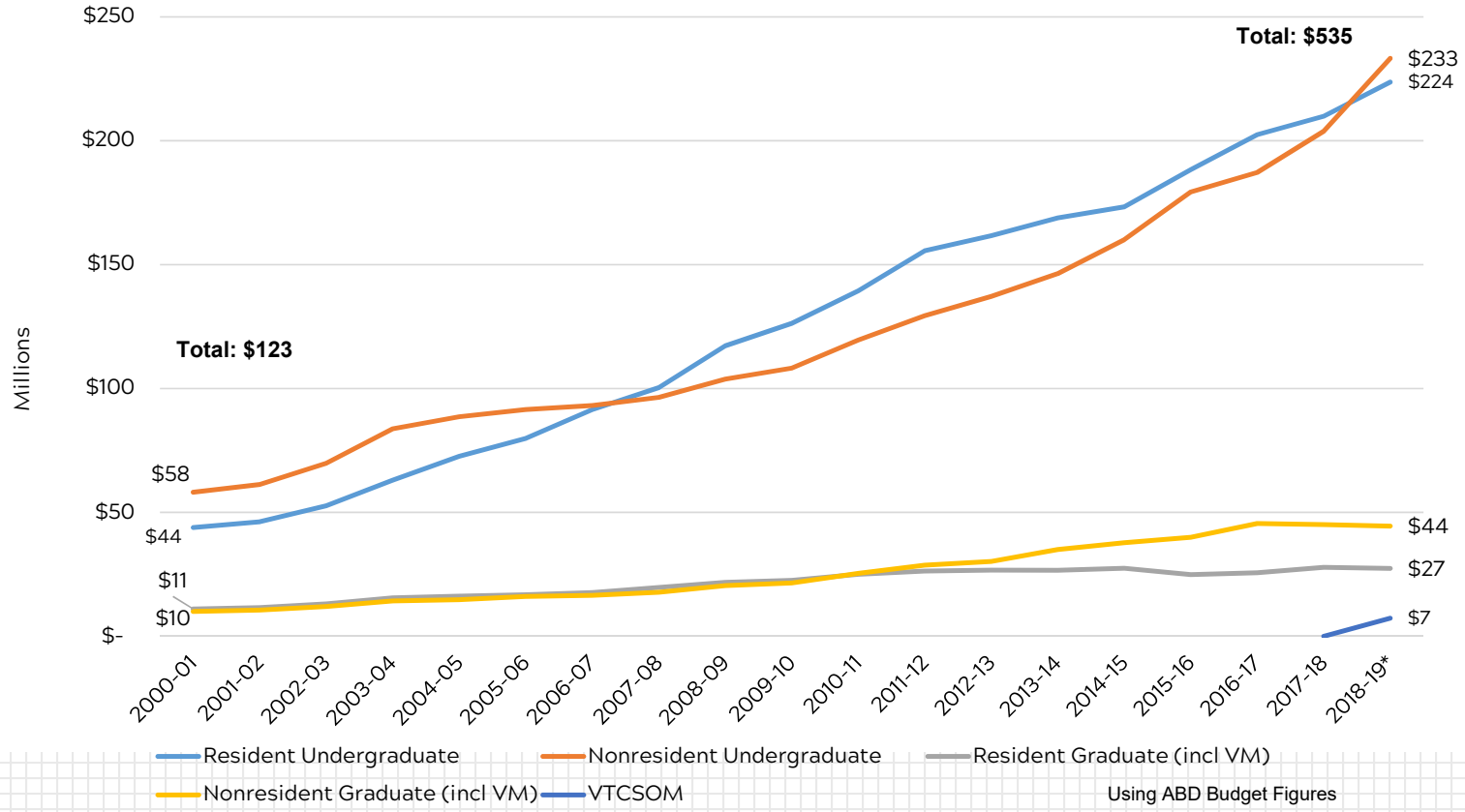
VIRGINIA TECH

2018-19 Educational and General Budget Components

($ in Millions)

	University Division	CE/AES Division	Total
Educational and General Budget			
General Fund	$164.4	$71.6	$236.0
Tuition and Fees	$552.1	$0.0	$552.1
Federal Funds	$0.0	$15.6	$15.6
Other	$44.5	$0.9	$45.4
Total Educational and General	**$761.0**	**$88.1**	**$849.2**
Percent of Total			
General Fund	21.6%	81.3%	27.8%
Tuition and Fees	72.5%	0.0%	65.0%
Federal Funds	0.0%	17.7%	1.9%
Other	5.9%	1.0%	5.3%
Total Percentage	100.0%	100.0%	100.0%

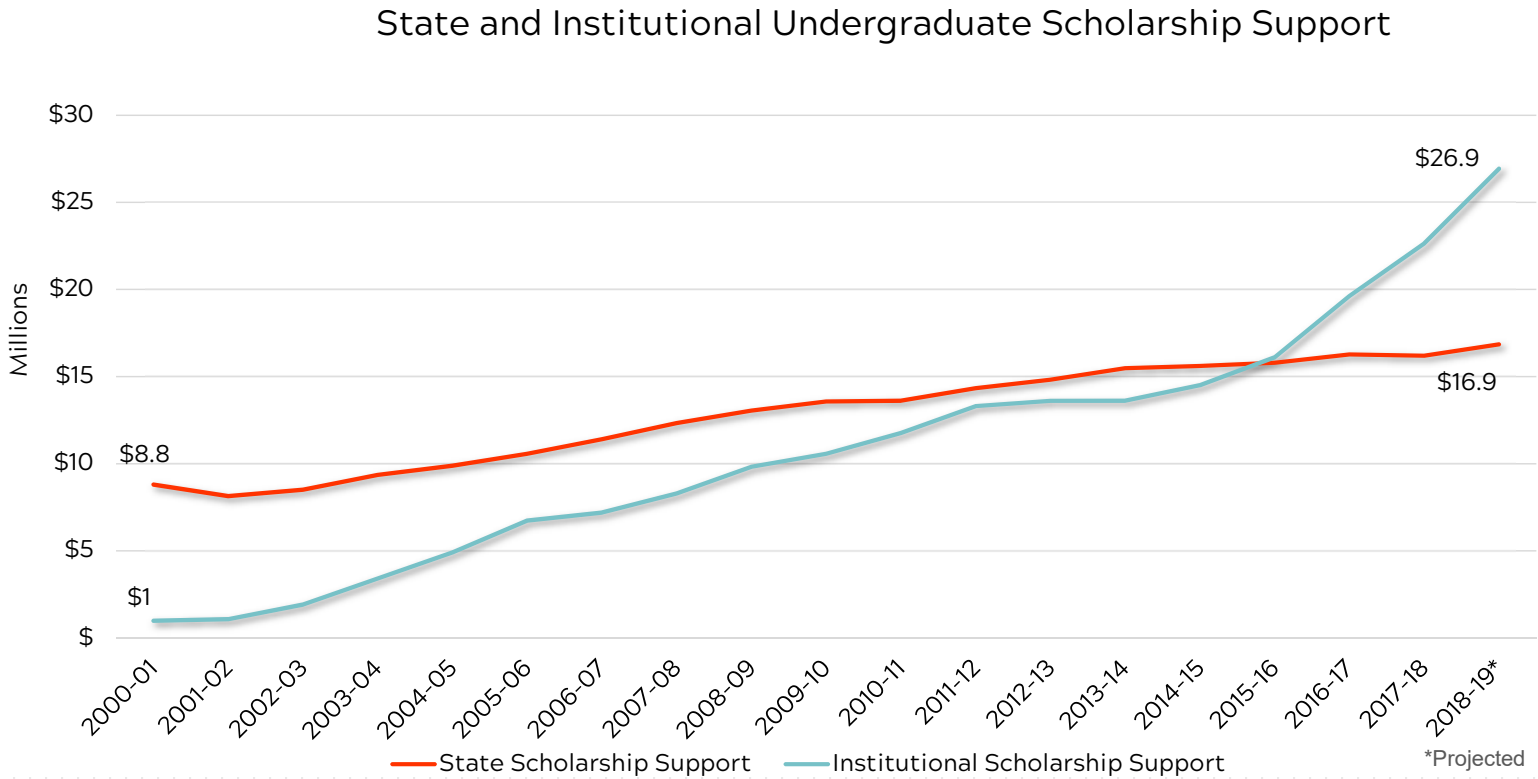
Net Tuition and E&G Fee Revenue Trend by Student Group



Using ABD Budget Figures

VIRGINIA TECH

Undergraduate Student Financial Aid



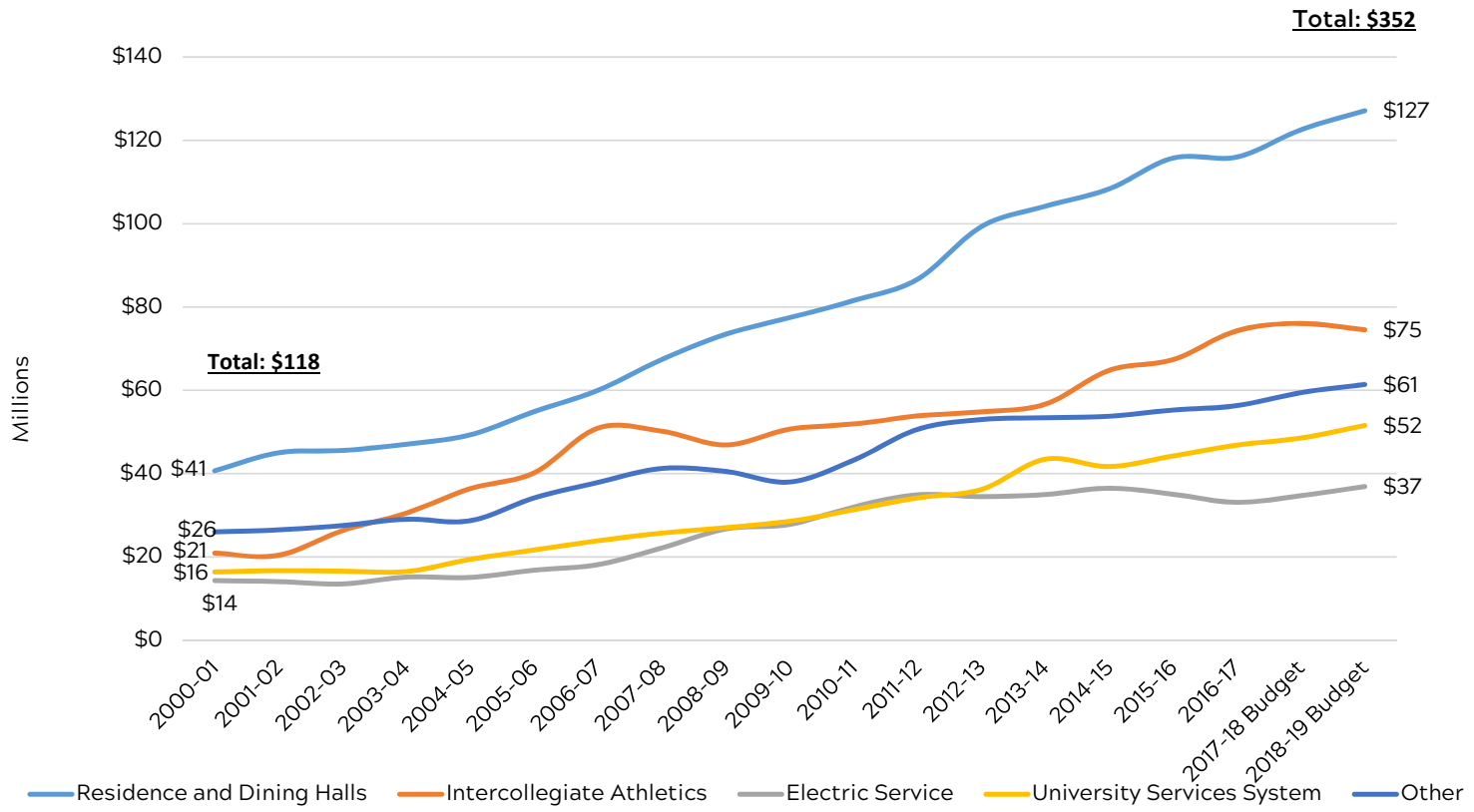
VIRGINIA TECH

2018-19 Key Auxiliary Enterprise Revenue Budget Changes

($ in Millions)

	2017-18 Original Budget	2017-18 Adjusted Budget	2018-19 Proposed Budget	Change $	Change %
Residence and Dining Hall System	$ 120.2	$ 122.5	$ 127.1	$ 4.5	3.7%
Intercollegiate Athletics	69.3	76.0	74.5	(1.5)	-2.0%
Subtotal	**$ 189.5**	**$ 198.6**	**$ 201.6**	**$ 3.0**	**1.5%**

Auxiliary Enterprise Revenue Trend by Unit



Other includes: Hotel & Conference Center, Software Sales, Parking, Photocopy, Printing, Tailor Shop, Licensing, Pouring Rights, Telecommunications, Hokie Passport Office, Fleet Services.

Compensation Plan

- The university is planning the following compensation programs to be effective on September 10, 2018:
  - 2.0% merit program for T&R and A/P Faculty
  - 2.0% merit program for University Staff
    - Classified Staff have the opportunity to convert to University Staff.
- Enhance the competitiveness of entering salaries in pay bands 1-3 in the staff structure by $0.50 per hour, effective May 25th, 2018.
- Recognition of National Distinction
    - Final outcomes of state budget and budget development will determine funding availability

Virginia Tech Carilion School of Medicine

VTCSOM 2018-19

($ in Millions)

	Budget
Revenue	
Medical Student Tuition	$7.3
Partnership Nongeneral Funds	6.8
Miscellaneous	0.6
Total Revenue	14.7
Expenses	
Medical Instruction	(14.7)
Net	$0

Capital Budget

Capital Project Authorizations

- Improvements =>$2M and/or =>5,000 gross square feet of new construction
- Acquisitions regardless of cost
- Capital leases
- Authorizations encompass program, scope, total cost, and funding sources

Capital Project Authorizations

- Only the State or Board of Visitors may authorize a capital project.

State

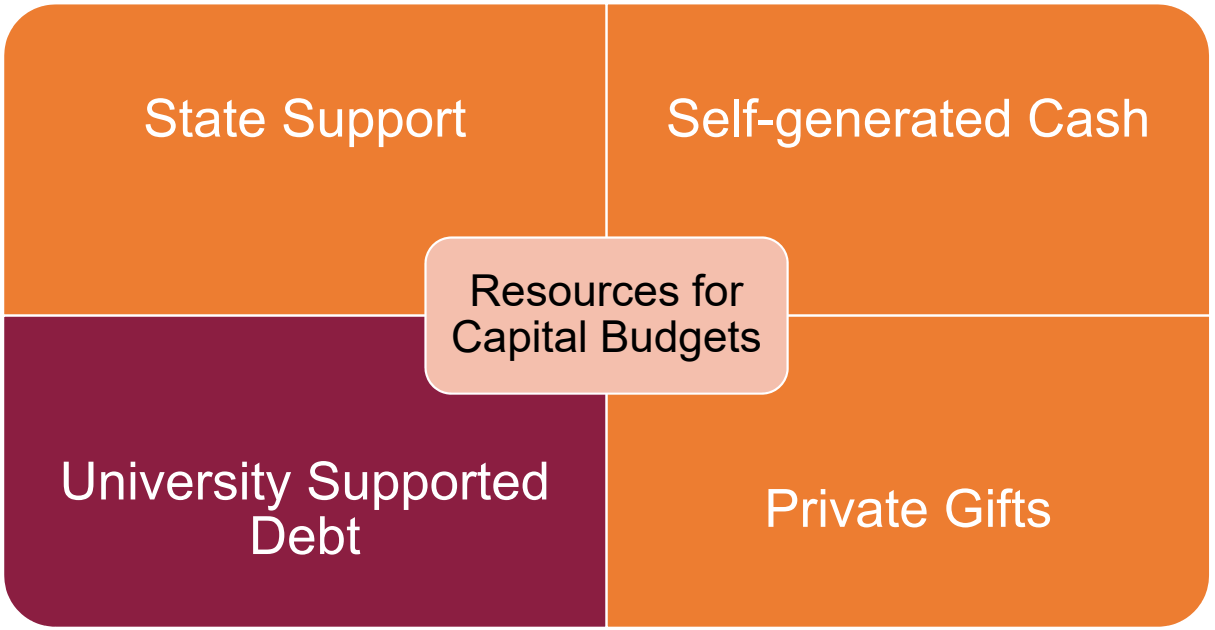
- $1+ General Fund

Board of Visitors

- 100% nongeneral funds

Capital Project Budgets

- University develops a financing plan to support the entire budget of each capital project prior to its authorization.



Fiscal Year 2019 Capital Projects

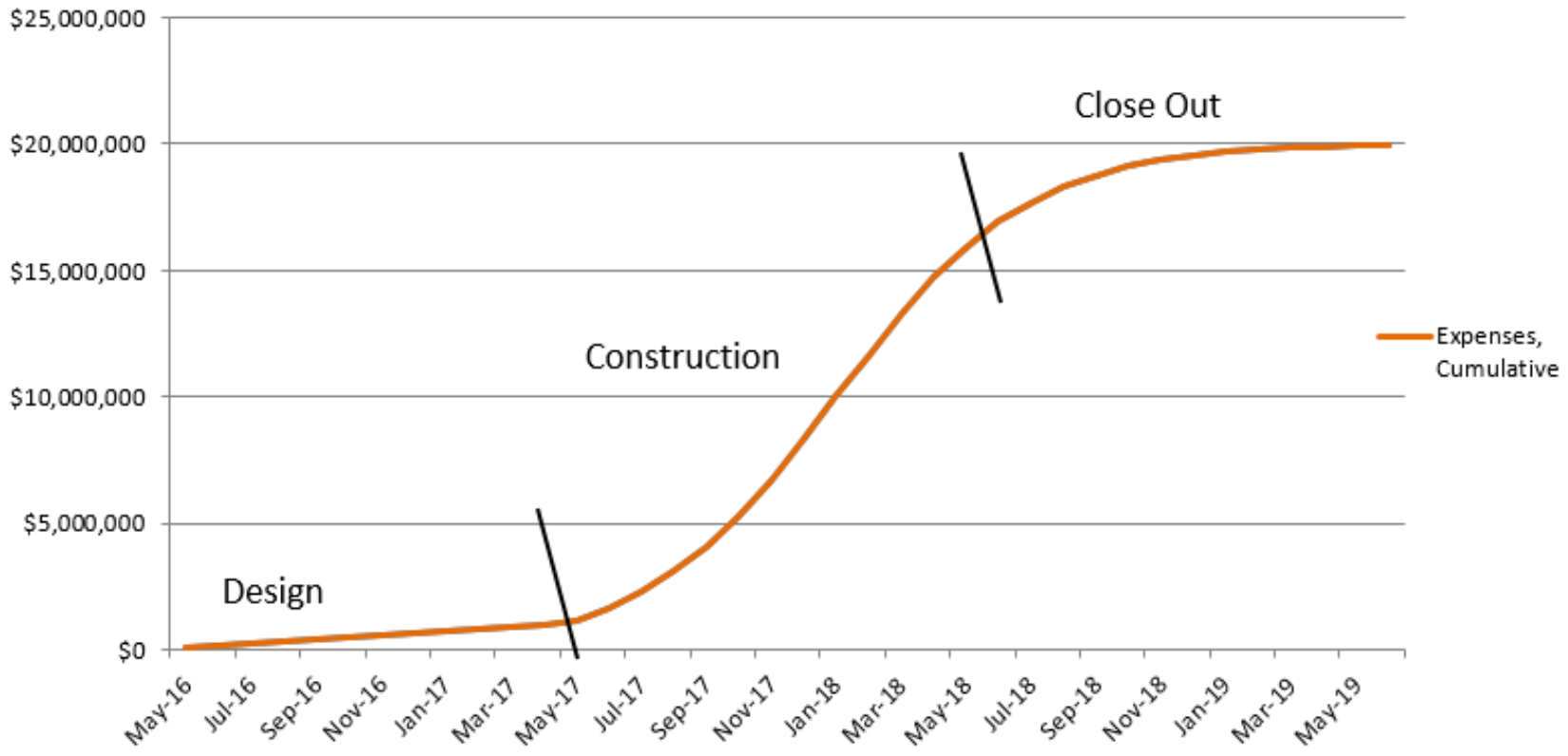
End FY 2018	28
Projects closed out June 30th	- 5
New projects effective July 1st	0
Start FY 2019	**23**

- 12 in design
- 7 in construction
- 4 in close-out

Fiscal Year 2019 Capital Budget

	($ in millions):
FY2019 total capital budget	$592.7
Less total expenditures through June 30th	- 196.3
Budget available for FY2019	$396.4
Estimated capital expenditures for FY2019	$125.1

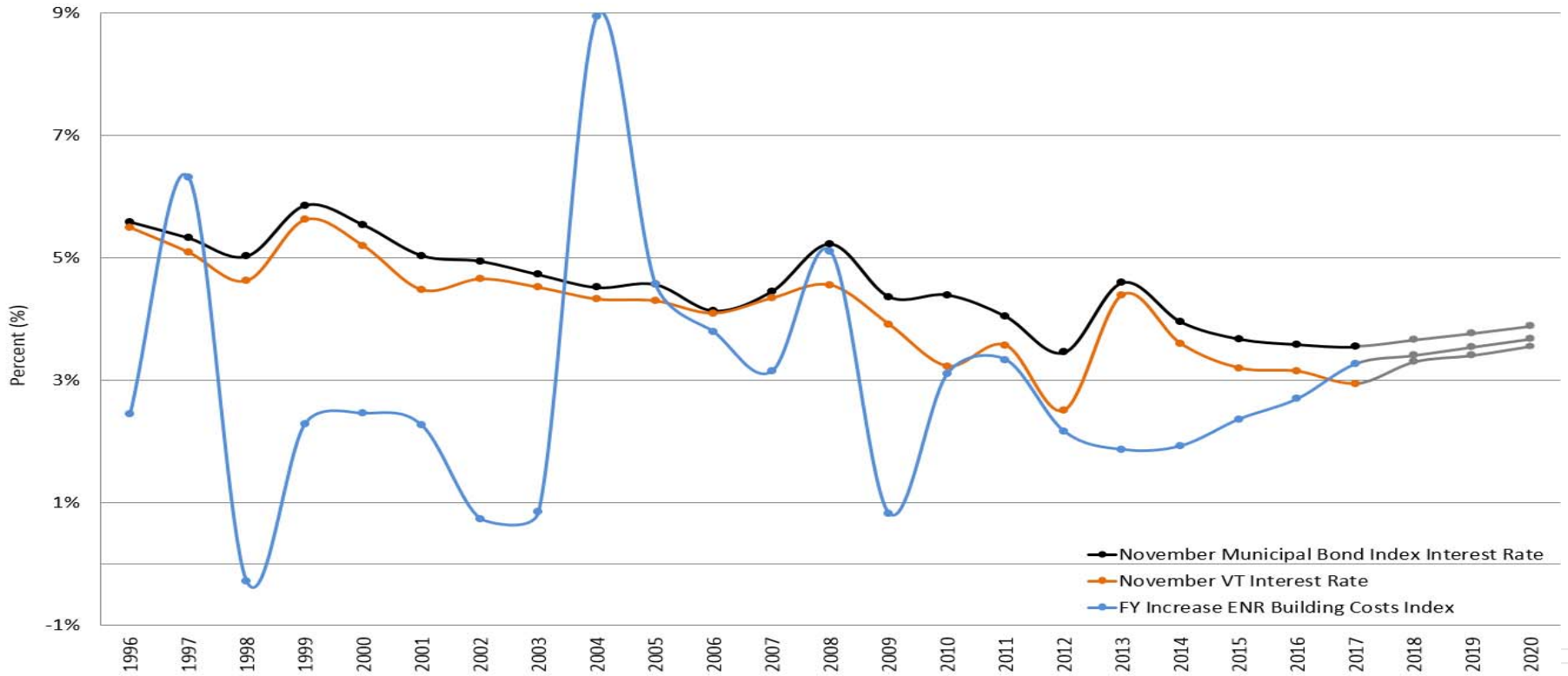
Capital Annual Budget Development



- Most sensitive to construction start dates

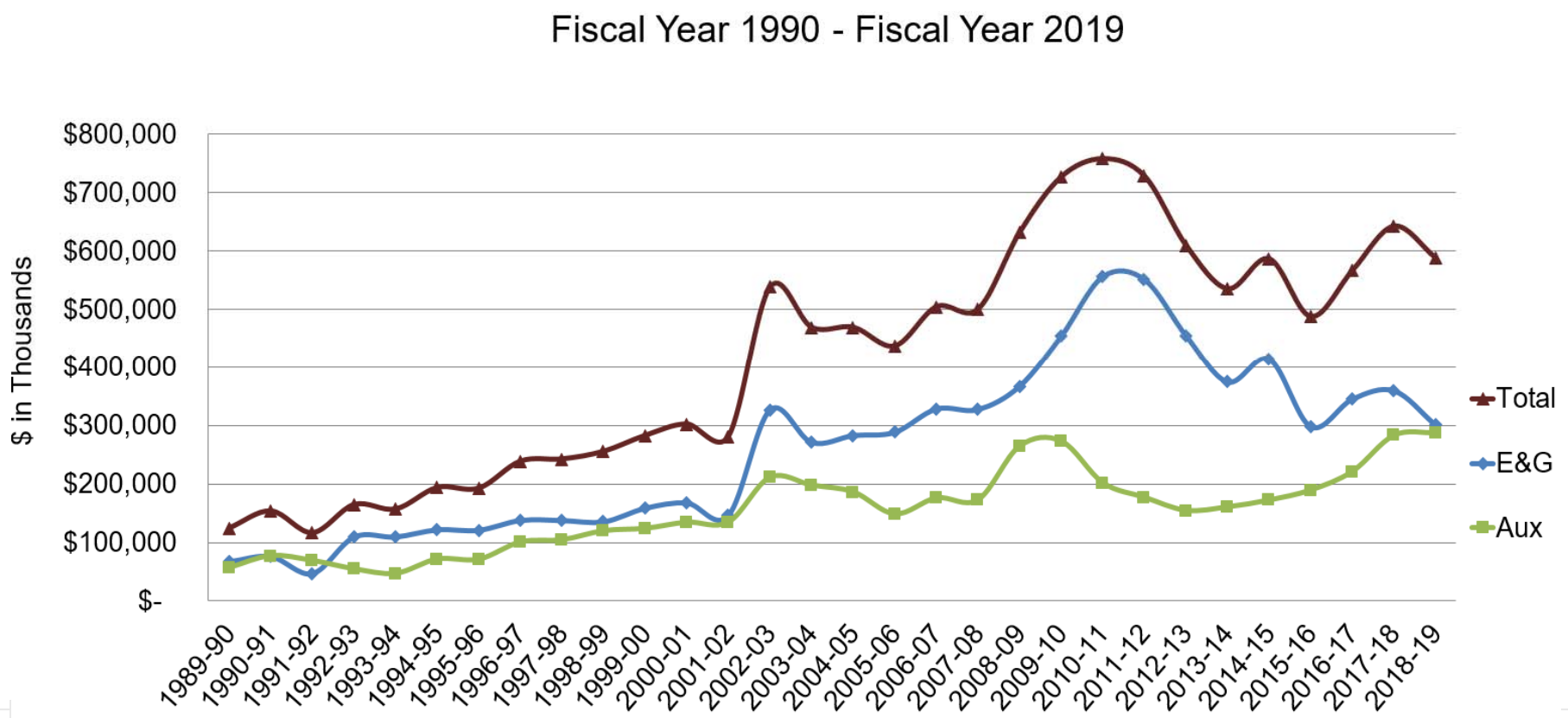
Escalation and Interest Rates

- Each project budget escalated to the mid-point of construction during development



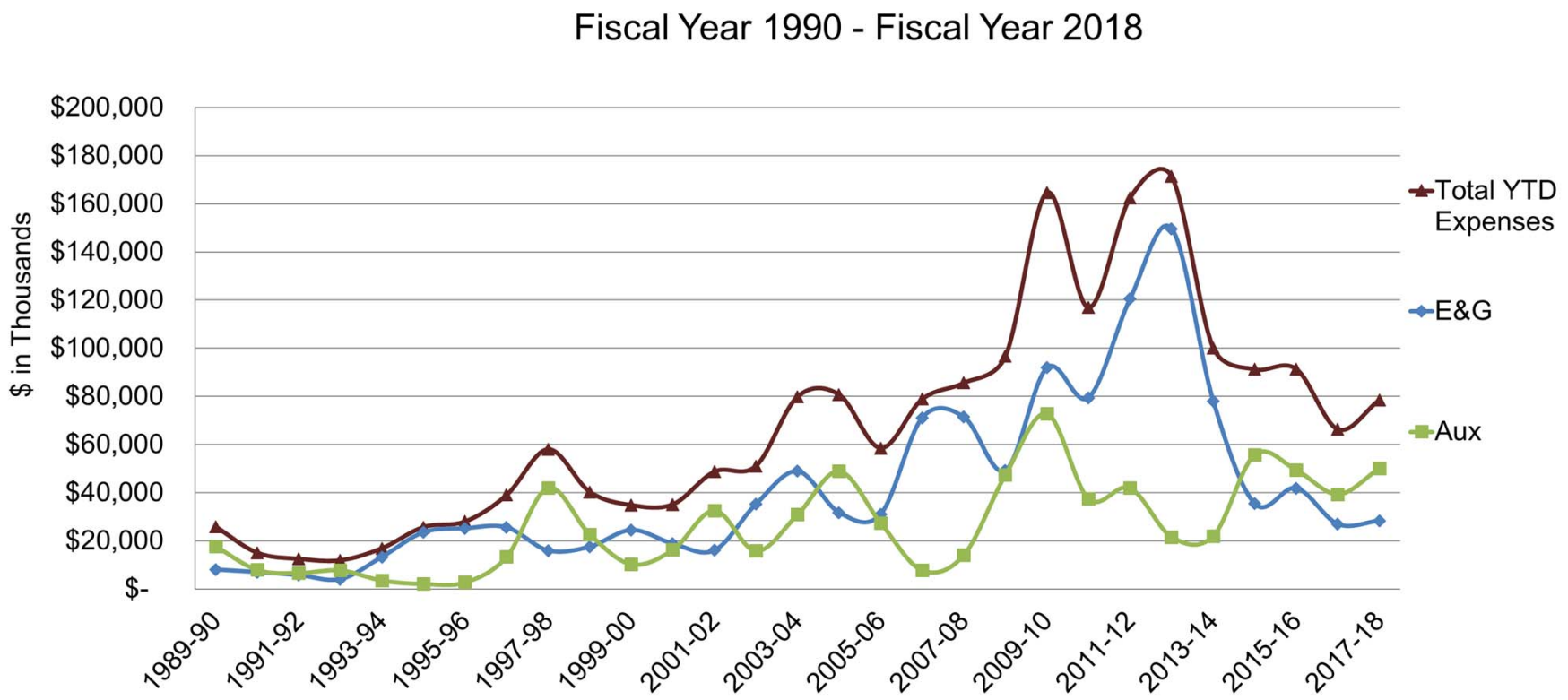
VIRGINIA TECH

Trend of Total Capital Program Budget



VIRGINIA TECH

Trend of Capital Program Expenses



VIRGINIA TECH

Capital Budget Summary

- Capital projects represent large expenditure commitments that occur in a relatively short period of time
- Resource plans for capital projects are generally developed several years prior to authorization
- This lead time is necessary to prepare resources for such large costs
- Once initiated, a capital project requires approximately four years to complete
- The annual budget reflects the projected expenditure activity for the given fiscal year

Recommendation

RECOMMENDATION:

That the proposed 2018-19 operating and capital budgets, as displayed on Schedules 1, 2, and 3, be approved.

June 4, 2018

Financial Performance Report - Operating and Capital

FINANCE AND RESOURCE MANAGEMENT COMMITTEE

July 1, 2017 to March 31, 2018

The Financial Performance Report of income and expenditures is prepared from two sources: actual accounting data as recorded at Virginia Tech and the annual budgets which are also recorded in the university accounting system. The actual accounting data reflect the modified accrual basis of accounting, which recognizes revenues when received rather than when earned and commitments to buy goods and services as encumbrances when obligated and as an expenditure when paid. The Original Budget was approved by the Board of Visitors at the June meeting. The Adjusted Budget reflects adjustments to incorporate actual experience or changes made during the fiscal year. These changes are presented for review and approval by the Finance and Resource Management Committee and the Board of Visitors through this report. Where adjustments impact appropriations at the state level, the university coordinates with the Department of Planning and Budget to ensure appropriations are reflected accurately.

The July to March 2017-18 budget (year-to-date) is prepared from historical data which reflects trends in expenditures from previous years as well as known changes in timing. Differences between the actual income and expenditures and the year-to-date budget may occur for a variety of reasons, such as an accelerated or delayed flow of documents through the accounting system, a change in spending patterns at the college level, or increases in revenues for a particular area.

Quarterly budget estimates are prepared to provide an intermediate measure of income and expenditures. Actual revenues and expenditures may vary from the budget estimates. The projected year-end budgets are, however, the final measure of budgetary performance.

OPERATING BUDGET
2017-18

Dollars in Thousands

	July 1, 2017 to March 31, 2018			Annual Budget for 2017-18		
	Actual	Budget	Change	Original	Adjusted	Change
Educational and General Programs						
University Division						
Revenues						
General Fund	$127,796	$127,796	$0	$161,675	$161,994	$319 (7)
Tuition and Fees	512,376	510,903	1,473 (1)	501,950	515,701	13,751 (8)
All Other Income	28,381	28,711	-330	39,350	37,879	-1,471 (9)
Total Revenues	$668,553	$667,410	$1,143	$702,975	$715,574	$12,599
Expenses						
Academic Programs	$-334,636	$-334,874	$238	$-439,964	$-447,706	$-7,742
Support Programs	-190,443	-191,537	1,094 (2)	-263,011	-267,868	-4,857
Total Expenses	$-525,079	$-526,411	$1,332	$-702,975	$-715,574	$-12,599 (7,8,9)
NET	$143,474	$140,999	$2,475	$0	$0	$0
CE/AES Division						
Revenues						
General Fund	$56,072	$56,072	$0	$70,961	$71,006	$45
Federal Appropriation	15,104	13,260	1,844 (3)	15,640	15,740	100
All Other Income	1,105	908	197	880	1,120	240
Total Revenues	$72,281	$70,240	$2,041	$87,481	$87,866	$385 (10)
Expenses						
Academic Programs	$-63,065	$-64,397	$1,332	$-80,864	$-81,249	$-385
Support Programs	-5,185	-5,233	48	-6,617	-6,617	0
Total Expenses	$-68,250	$-69,630	$1,380	$-87,481	$-87,866	$-385 (10)
NET	$4,031	$610	$3,421	$0	$0	$0
Auxiliary Enterprises						
Revenues	$290,077	$289,997	$80 (4)	$333,313	$341,265	$7,952 (4)
Expenses	-254,230	-262,091	7,861 (4)	-326,617	-368,248	-41,631 (4)
Reserve Drawdown (Deposit)	-35,847	-27,906	-7,941 (4)	-6,696	26,983	33,679 (4)
NET	$0	$0	$0	$0	$0	$0
Sponsored Programs						
Revenues	$228,430	$250,830	$-22,400 (5)	$344,174	$344,879	$705 (11)
Expenses	-233,221	-279,383	46,162 (5)	-344,174	-344,879	-705 (11)
Reserve Drawdown (Deposit)	4,791	28,553	-23,762	0	0	0
NET	$0	$0	$0	$0	$0	$0
Student Financial Assistance						
Revenues	$26,180	$26,487	$-307	$25,541	$26,620	$1,079 (12)
Expenses	-25,146	-25,693	547	-25,541	-26,620	-1,079 (12)
Reserve Drawdown (Deposit)	-1,034	-794	-240	0	0	0
NET	$0	$0	$0	$0	$0	$0
All Other Programs *						
Revenue	$6,368	$7,168	$-800 (6)	$7,399	$9,579	$2,180 (13)
Expenses	-3,331	-4,092	761 (6)	-7,399	-10,034	-2,635 (13)
Reserve Drawdown (Deposit)	-3,037	-3,076	39 (6)	0	455	455 (13)
NET	$0	$0	$0	$0	$0	$0
Total University						
Revenues	$1,291,889	$1,312,132	$-20,243	$1,500,883	$1,525,783	$24,900
Expenses	-1,109,257	-1,167,300	58,043	-1,494,187	-1,553,221	-59,034
Reserve Drawdown (Deposit)	-35,127	-3,223	-31,904	-6,696	27,438	34,134
NET	$147,505	$141,609	$5,896	$0	$0	$0

* All Other Programs include federal work study, surplus property, and unique military activities.

OPERATING BUDGET

1. Tuition and Fee revenue collections are ahead of historical projections due to the timing of tuition collection.
2. Support program expenditures are lower than projected due to timing of expenses.
3. The budget for federal revenue is established to match projected allotments from the federal government that are expected to be drawn down during the state fiscal year. All expenses in federal programs are covered by drawdowns of federal revenue up to allotted amounts. Federal revenue in the Cooperative Extension/Agriculture Experiment Station Division was greater than the projected budget due to the timing of federal draw that were requested in 2016-17, but received in 2017-18.
4. Quarterly and projected annual variances are explained in the Auxiliary Enterprises section of this report.
5. Historical patterns have been used to develop a measure of the revenue and expenditure activity for Sponsored Programs. Actual revenues and expenses may vary from the budget estimates because projects are initiated and concluded on an individual basis without regard to fiscal year. Total sponsored research revenues and expenses are less than projected. Total sponsored program expenditures are 0.6% greater than March 31, 2017.
6. Revenue and expenses for All Other Programs were less than projected due to timing of revenues and surplus property expense activity.
7. The University Division General Fund revenue budget was increased by $0.3 million for Health Insurance and other central fund adjustments.
8. At the beginning of the year, the annual budget for Tuition and Fees had been increased $1.7 million for the finalization of the budgets for tuition and Education & General fees. During the second quarter, the budget for Tuition and Fees had been increased $8.6 million due to higher than projected undergraduate enrollment for fall semester, lower than projected enrollment in the graduate programs, and a decrease in Summer session revenues. The budget for Tuition and Fees has been increased by $3.5 million in the third quarter for stronger than projected spring retention and winter session revenues. The corresponding expenditure budgets have been adjusted accordingly.
9. The All Other Income revenue budget for the University Division has been decreased $1.8 million for budget finalizations in Sales and Services and Continuing Education. The budget for Earmarked Sales and Services has been increased by $0.2 million for stronger than projected activity in the Equine Medical Center, $0.15 million for milk sales, $0.06 million for VA Racing Revenue and decreased by $0.03 million for miscellaneous self-supporting activities. The corresponding expenditure budgets have been adjusted accordingly.
10. The Cooperative Extension/Agriculture Experiment State Division General Fund revenue budget was increased $0.05 million for Health Insurance and other central fund adjustments. Federal funds revenue budget was increased $0.1 million for carryover of unexpended federal Hatch funds. The self-generated revenue budget increased $0.24 million for greater than projected self-generated revenues. The corresponding expenditure budgets have been adjusted accordingly.
11. The Sponsored Programs revenue and expense budgets were increased $0.7 million to finalize budgets.
12. During budget finalizations, the Student Financial Assistance general funds revenue and expense budgets were increased $0.7 million. In the first quarter of 2017-18, the Student Financial Assistance revenue and expenditure budgets were increased $0.4 million to support enrollment growth beyond the originally planned enrollment growth.
13. The projected annual budget for All Other Programs was increased $2.2 million to finalize budgets and $0.45 million for outstanding 2016-17 commitments that were initiated but not completed before June 30, 2017.

UNIVERSITY DIVISION
AUXILIARY ENTERPRISES

Dollars in Thousands

	July 1, 2017 to March 31, 2018			Annual Budget for 2017-18		
	Actual	Budget	Change	Original	Adjusted	Change
Residence and Dining Halls *						
Revenues	$115,666	$114,759	$907 (1)	$120,157	$122,539	$2,382 (6)
Expenses	-84,002	-85,456	1,454 (1)	-117,364	-124,296	-6,932 (6,7,8,9)
Reserve Drawdown (Deposit)	-31,664	-29,303	-2,361 (1)	-2,793	1,757	4,550 (6,7,8,9)
Net	$0	$0	$0	$0	$0	$0
Parking and Transportation						
Revenues	$12,665	$12,490	$175	$13,704	$13,903	$199 (10)
Expenses	-8,788	-9,915	1,127 (2)	-13,266	-13,854	-588 (8,9,10)
Reserve Drawdown (Deposit)	-3,877	-2,575	-1,302 (2)	-438	-49	389 (8,9,10)
Net	$0	$0	$0	$0	$0	$0
Telecommunications Services						
Revenues	$17,365	$18,884	$-1,519 (3)	$22,087	$22,087	$0
Expenses	-15,532	-17,113	1,581 (3)	-23,161	-24,700	-1,539 (8,9,11)
Reserve Drawdown (Deposit)	-1,833	-1,771	-62	1,074	2,613	1,539 (8,9,11)
Net	$0	$0	$0	$0	$0	$0
University Services * **						
Revenues	$48,516	$47,907	$609 (4)	$48,521	$48,531	$10 (12)
Expenses	-35,879	-37,597	1,718 (4)	-47,655	-49,919	-2,264 (7,8,9,12)
Reserve Drawdown (Deposit)	-12,637	-10,310	-2,327 (4)	-866	1,388	2,254 (7,8,9,12)
Net	$0	$0	$0	$0	$0	$0
Intercollegiate Athletics *						
Revenues	$52,569	$52,341	$228	$69,283	$76,039	$6,756 (13)
Expenses	-61,479	-61,508	29	-68,903	-77,079	-8,176 (7,8,9,13)
Reserve Drawdown (Deposit)	8,910	9,167	-257	-380	1,040	1,420 (7,8,9,13)
Net	$0	$0	$0	$0	$0	$0
Electric Service *						
Revenues	$24,099	$24,913	$-814 (5)	$36,061	$34,720	$-1,341 (14)
Expenses	-22,578	-24,150	1,572 (5)	$-35,531	-34,562	969 (8,9,14)
Reserve Drawdown (Deposit)	-1,521	-763	-758 (5)	-530	-158	372 (8,9,14)
Net	$0	$0	$0	$0	$0	$0
Inn at Virginia Tech/Skelton Conf. Center						
Revenues	$9,515	$9,473	$42	$11,855	$12,337	$482 (15)
Expenses	-9,364	-9,394	30	-11,799	-12,299	-500 (7,8,9,15)
Reserve Drawdown (Deposit)	-151	-79	-72	-56	-38	18 (7,8,9,15)
Net	$0	$0	$0	$0	$0	$0
Other Enterprise Functions ***						
Revenues	$9,682	$9,230	$452	$11,645	$11,109	$-536 (16)
Expenses	-16,608	-16,958	350	-8,938	-31,539	-22,601 (7,8,9,16)
Reserve Drawdown (Deposit)	6,926	7,728	-802	-2,707	20,430	23,137 (7,8,9,16)
Net	$0	$0	$0	$0	$0	$0
TOTAL AUXILIARIES						
Revenues	$290,077	$289,997	$80	$333,313	$341,265	$7,952
Expenses	-254,230	-262,091	7,861	-326,617	-368,248	-41,631
Reserve Drawdown (Deposit)	-35,847	-27,906	-7,941	-6,696	26,983	33,679
Net	$0	$0	$0	$0	$0	$0

* University Systems include Dormitory and Dining Hall System, University Services System, Intercollegiate Athletics System, and Electric Service System. The Systems were created to provide assurance to bond holders that system revenues are pledged for the payment of debt service and to allow for dedicated repair and replacement that are not subject to liens of any creditor of the university.

** University Services System includes Career Services, Center for the Arts, Health Services, Recreational Sports, Student Centers & Activities, Student Organizations, and the VT Rescue Squad.

*** Other Enterprise Functions include Golf Course, Hokie Passport, Library Café, Library Photocopy, Licensing & Trademark, Little Hokie Hangout, New Student and Family Programs, Pouring Rights, Printing Services, Software Sales, Student Athlete Academic Support Services (SAASS), Tailor Shop and Clearing Accounts.

AUXILIARY ENTERPRISE BUDGET

1. Revenues in Residence and Dining Halls are higher than projected due to residence hall occupancy and self-generated revenue being greater than planned. Expenses are lower than projected due to timing of operating and project expenses.
2. Expenses in Parking and Transportation Services are lower than projected due to timing of operating expenses and Fleet vehicle purchases.
3. Revenues and expenses for Telecommunications Services are lower than projected due to lower than anticipated special project volume.
4. Revenues for the University Services System are higher than projected due to higher than budgeted Health and Recreational Sports program revenues. Expenses are lower than projected due to the timing of Recreational Sports project expenses.
5. Revenue and expenses for the Electric Service auxiliary are lower than projected due to lower than anticipated electricity consumption. Expenses are also lower than projected due to lower than forecasted total cost of purchased electricity.
6. The projected annual revenue, expense, and reserve budgets for Residence and Dining Halls were increased for student enrollment revenue, dining business volume, $0.67 million in Dining equipment, and $1.3 million in Residential facility projects. Revenue and expense budgets were decreased for reduced Steger Center enrollment.
7. The projected annual expense and reserve budgets for Auxiliary Enterprises were increased $0.08 million for state compensation actions for high-turnover positions.
8. The projected annual expense budget for Auxiliary Enterprises was increased $5.9 million for outstanding 2016-17 commitments and projects that were initiated but not completed before June 30, 2017. This amount includes $1.0 million for Residence Halls, $3.2 million in Dining Hall commitments and projects, and $0.3 million for Electric Service. The remainder is spread across the other auxiliary programs.
9. The projected annual expense and reserve draw budgets for the Auxiliary Enterprises were increased $0.46 million for the auxiliary share of the state's assessment of a one-time Virginia Retirement System (VRS) investment in 2015 which help contain future VRS actuarial rates.
10. The projected annual revenue, expense, and reserve budgets for Parking and Transportation Services were increased for parking permit sales and operating expenses.
11. The projected annual expense and reserve budgets for Telecommunications Services were increased for enhancement of network security software and Roanoke campus network infrastructure.
12. The projected annual expense and reserve budgets for the University Services System were increased for two additional counseling positions and psychiatric nurse practitioner for Cook Counseling Center, Career and Professional Development personnel, health and recreation sports services in Roanoke, Recreational Sports challenge course, and growth in self-generated revenues.
13. The projected annual revenue budget for Intercollegiate Athletics was increased $6.8 million to accommodate additional revenue of $1 million for the football team's participation in the Camping World Bowl, $3.3 million in self-generated revenue, and $2.5 million in private fundraising for the Cassell seating project, men's basketball locker room, athlete meals, and indoor practice facility. Annual expense and reserve draw budgets were increased $8.8 million to accommodate increases of $0.9 million for coaching staff transitions, athletic contracts, and competitive compensation, $2.1 million for Camping World Bowl expenses, $3.1 million for sports expenses, $0.3 million for operating expenses, $0.1 million for English Field astroturf, $0.6 milion for Cassell seating project, $0.5 million for men's basketball locker room project, $1.4 million for indoor practice facility capital project, and $0.9 million for videoboards and audio projects. The budget was decreased $1.1 million for the technical realignment of Student Athlete Academic Support Services.
14. The projected annual revenue and expense budgets for the Electric Services auxiliary were decreased due to lower than projected cost of wholesale electricity.
15. The projected annual revenue, expense, and reserve budgets for the Inn at Virginia Tech and Skelton Conference Center were increased for business volume and facility maintenance.
16. The projected annual revenue, expense, and reserve budget for Other Enterprise Functions were increased for additional business volume in Licensing and Trademark and Software Sales, student affairs operating support, $22 million internal financing of board approved Athletics facilities improvements project, and scholarship expenses in Licensing and Trademark. The revenue budget was decreased for lower than projected Printing Services business volume.

CAPITAL OUTLAY PROJECTS
AUTHORIZED AS OF MARCH 31, 2018
Dollars in Thousands

	PROJECT INITIATED	FISCAL YEAR ACTIVITY ANNUAL BUDGET	FISCAL YEAR ACTIVITY YTD EXPENSES	TOTAL PROJECT BUDGET STATE SUPPORT	TOTAL PROJECT BUDGET NONGENERAL FUND	TOTAL PROJECT BUDGET REVENUE BOND	TOTAL PROJECT BUDGET TOTAL BUDGET	TOTAL PROJECT BUDGET CUMULATIVE EXPENSES	
EDUCATIONAL AND GENERAL PROJECTS									
Design Phase									
Improve Kentland Facilities	Sep 2013	$ 6,000	27	$ 9,363	$ -	$ -	$ 9,363	$ 917	(1)
Renovate Undergraduate Science Laboratories	Jul 2016	6,250	921	-	10,000	-	10,000	1,345	(2)
Agriculture Production Facilities	Oct 2016	1,080	260	22,136	-	-	22,136	281	(3)
Chiller Plant Phase II	Oct 2016	4,040	1,221	31,024	-	9,797	40,821	1,277	(4)
Holden Hall Renovation	Oct 2016	3,840	998	44,386	-	17,500	61,886	1,899	(5)
Gas-Fired Boiler at the Central Steam Plant	Apr 2017	3,375	13	-	6,800	-	6,800	13	(6)
Planning: Intelligent Infrastructure and Construction Complex	Apr 2017	2,880	66	-	6,000	-	6,000	66	(7)
Planning: Undergraduate Science Laboratory Building	Jul 2017	2,500	697	-	3,084	-	3,084	697	(8)
Construction Phase									
Maintenance Reserve	On-going	12,860	6,752	20,297	-	-	20,297	12,159	(9)
Academic Buildings Renewal	Sep 2013	18,600	12,175	35,029	-	-	35,029	17,949	(10)
Address Fire Alarm Systems and Access	Jun 2014	1,265	155	4,891	-	-	4,891	3,380	(11)
Health Sciences & Technology	Oct 2016	10,200	3,509	48,307	17,765	23,793	89,865	3,509	(12)
Close-Out									
Classroom Building	Dec 2012	1,050	753	42,652	-	-	42,652	42,355	(13)
Biocomplexity Data Center	Sep 2015	900	495	-	5,900	-	5,900	5,245	(14)
Eastern Shore AREC Storage Building	Apr 2016	381	324	-	535	-	535	478	(15)
TOTAL EDUCATIONAL AND GENERAL PROJECTS		$ 75,221	28,367	$ 258,085	$ 50,084	$ 51,090	$ 359,259	$ 91,569	

CAPITAL OUTLAY BUDGET

Educational and General Projects

1. This project is to provide a metabolism research laboratory, an applied reproduction facility, and a building for animal demonstration, handling, and holding spaces. Bid efforts in 2016 and 2017 were more than ten percent over budget. The university will rebid in June 2018 under a modified bid package and more aggressive outreach effort. The annual budget will be underspent because it anticipated a construction start in fall 2017.

2. This project will renovate seven laboratories within Derring Hall and Hahn Hall for undergraduate science laboratory classes in biology, chemistry, physics, and microbiology. The project was bid in December 2017 and received no responses. The project will be rebid in June 2018 under a modified bid package and more aggressive outreach effort. The annual budget will be underspent because it anticipated a construction start in January 2018.

3. This project is for the first of two phases to renew the existing facilities for the livestock and poultry programs. This first phase includes an approximate total scope of 126,000 gross square feet of new and renovated facilities at the Blacksburg campus and three nearby university production and research farms. Schematic design is nearing completion with preliminary design starting in April 2018. The annual budget will be underspent because design has progressed slower than projected.

4. This project continues the strategic infrastructure advancements initiated by the Chiller Plant, Phase I project. Phase II includes the upgrade of campus utility systems and addresses several strategic needs for shifting the campus to a lower resource consuming cooling service with improved redundancies. Preliminary design is underway with working drawings expected to start May 2018. The annual budget will be underspent because design has progressed slower than projected.

5. This project is for a complete renovation and 60,000 gross square foot expansion of Holden Hall to accommodate the instruction and research programs of Materials Science and Engineering, Mining and Minerals Engineering, and Computer Science Engineering. Preliminary design is underway.

6. This project will design, purchase, and install a new Gas-Fired Boiler within the Central Steam Plant. Preliminary design is underway. The annual budget will be underspent because design has progressed slower than projected.

7. This planning project is for Hitt Hall, the Fusion Laboratories, and the Smart Dining Center. The total project funding plan calls for $50 million to cover the three programs. Criteria document development for Design-Build is underway. The annual budget will be underspent because design has progressed slower than projected.

8. This planning project is for an entirely state funded 102,000 gross square foot science laboratory building adjacent to the new classroom building. The university is temporarily funding the project and will be reimbursed by the state once construction funding is appropriated. Schematic design is underway. The annual budget will be underspent because design has progressed slower than projected.

9. The state maintenance reserve program requires a biennial budget expenditure of 85 percent, which is $17.3 million of cumulative expenses by June 30, 2018. The annual budget amount reflects the spending level required to slightly exceed the performance requirement.

10. This project is for the renovation of Davidson Hall-Front Section, Sandy Hall, and the Liberal Arts Building. The project is under construction with substantial completion expected in summer 2018.

11. This project supports progress on fire alarm systems and accessibility improvements for E&G buildings. The final two projects, Norris Hall and Litton Reaves Hall, are underway with anticipated completion summer 2018.

12. This project is being delivered under a Public Private Partnership with Carilion Clinic and is located adjacent to the existing Virginia Tech-Carilion Research Institute facility in Roanoke, Virginia. Construction is underway and on schedule for an expected completion date of March 2019. The annual budget will be underspent because construction invoices are slower than expected.

13. The project is complete and occupied since August 2016. The project may be closed and financial accounts terminated when final invoices are received and paid.

14. The project is complete and occupied since July 2017. The project may be closed and financial accounts terminated when final invoices are received and paid.

15. The project is complete and occupied since August 2017. The project may be closed and financial accounts terminated when final invoices are received and paid.

Capital Outlay Projects Authorized as of March 31, 2018 (Continued)

Dollars in Thousands

	PROJECT INITIATED	FISCAL YEAR ACTIVITY ANNUAL BUDGET	FISCAL YEAR ACTIVITY YTD EXPENSES	TOTAL PROJECT BUDGET STATE SUPPORT	TOTAL PROJECT BUDGET NONGENERAL FUND	TOTAL PROJECT BUDGET REVENUE BOND	TOTAL PROJECT BUDGET TOTAL BUDGET	TOTAL PROJECT BUDGET CUMULATIVE EXPENSES	
AUXILIARY ENTERPRISE PROJECTS									
Design Phase									
Student Wellness Improvements	Jun 2016	$ 2,259	943	$ -	$ 6,010	$ 56,990	$ 63,000	$ 1,469	(1)
Creativity & Innovation District Residence Hall	Oct 2016	3,200	102	-	-	26,818	26,818	357	(2)
Dietrick First Floor and Plaza Renovation	Sept 2017	500	3	-	5,000	2,000	7,000	3	(3)
ACC Network Studio	Mar 2018	250	0	-	-	10,000	10,000	-	(4)
Student-Athlete Performance Center	Mar 2018	250	0	-	15,165	-	15,165	-	(5)
Commonwealth Ballroom Improvements	Mar 2018	200	0	-	3,246	-	3,246	-	(6)
Construction Phase									
Maintenance Reserve	On-going	7,000	6,627	-	7,000	-	7,000	6,627	(7)
Lane Substation Expansion	Sept 2015	4,000	1,758	-	2,000	4,500	6,500	2,485	(8)
O'Shaughnessy Renovation	Apr 2016	16,000	10,713	-	8,867	12,633	21,500	12,944	(9)
Athletic Facilities Improvements	Aug 2016	20,000	23,880	-	37,500	-	37,500	29,976	(10)
Close-Out									
Unified Communications & Network Renewal	Apr 2012	1,637	727	-	9,564	6,944	16,508	15,598	(11)
Upper Quad Residential Facilities	May 2013	4,668	4,946	-	35,671	53,729.00	89,400	88,042	(12)
Residential Door Access Improvements	Dec 2015	757	462	-	7,735	-	7,735	7,440	(13)
TOTAL AUXILIARY ENTERPRISE PROJECTS		$ 60,721	50,160	$ -	$ 137,758	$ 173,613	$ 311,372	$ 164,941	
GRAND TOTAL		$ 135,942	78,527	$ 258,085	$ 187,842	$ 224,703	$ 670,630	$ 256,510	

Auxiliary Enterprises Projects

1. This project includes improvements to War Memorial Hall for Cook Counseling; Hokie Wellness; Recreational Sports; Human Nutrition, Foods, and Exercise; and the School of Education. The scope includes deferred maintenance, code requirements, and installing air conditioning. Renovations to Schiffert Health Center in McComas Hall are included to convert the area vacated by counseling services to accommodate student health services. Schematic design is underway.

2. This project is planning a new residential community with approximately 596 beds, including 176 beds for student-athletes, and academic collaborative spaces to support creativity and innovation programs. Schematic design is underway to finalize the scope, size, and shape to fit within a $105.5 million total project budget and schedule for a summer 2021 opening. The current project authorization reflects a traditional 350 bed residential program. The authorization will need a future adjustment based on the results of the programing study.

3. This project includes refurbishing the first floor of Dietrick Hall, inserting a modern food service venue, enclosing 6,400 gross square feet of overhang, and improvements to the outdoor plaza. Schematic design is underway with occupancy expected fall 2019.

4. This project includes improvements and expansion of broadcasting facilities to support the new ACC Network channel to be launched fall 2019. The project was authorized March 26, 2018 and is inserted as a new item in the report for the third quarter. Programming is underway with occupancy expected spring 2019.

5. This project includes a complete renovation of the fourth floor of the Jamerson Center, construction of a balcony cantilevered from the fourth floor, and a new elevator tower. The project was authorized March 26, 2018 and is inserted as a new item in the report for the third quarter. Schematic design is underway with occupancy expected in the first calendar quarter of 2021.

6. This project refurbishes and updates outdated and nonfunctioning lighting systems, stage systems, ceiling tiles, and air handlers. Installation of a Skyfold dividing wall will increase usage capabilities of the Commonwealth Ballroom. The project was authorized March 26, 2018 and is inserted as a new item in the report for the third quarter. Construction is expected to start October 2018 with occupancy expected March 2019.

7. Projects are scheduled and funded by the auxiliary enterprises during the annual Auxiliary Enterprise budgeting process. The units prepare five-year plans that outline their highest priority deferred maintenance needs. The annual budget and total project budget reflect the spending plans of the auxiliary units on scheduled maintenance reserve work for fiscal year 2018. The auxiliary maintenance reserve program covers 104 assets with a total replacement value of $1.1 billion.

8. This project expands the Substation on Innovation Drive. The project includes the purchase and installation of two 28,000 kilovolt-amps (kVA) transformers, two circuit switchers, six distribution reclosers with space for an additional four reclosers, a control house and associated relay, and control equipment. Construction is underway with completion expected summer 2019.

9. This project will update O'Shaughnessy Hall's interior; mechanical, electrical, and plumbing systems; elevators; address other deferred maintenance items as needed; and installing air conditioning. Improvements include converting O'Shaughnessy into a living-learning community to modernize the residential program. Construction started late spring 2017 with occupancy expected fall 2018.

10. This project includes construction improvements to Rector Field House and the Baseball Facilities and feasibility studies for an athletic nutrition center and tennis facilities improvements. The feasibility studies are complete. Construction for Rector Field House and Baseball Facilities is nearly complete and are in use under a temporary certificate of occupancy. Year-to-date expenses exceeded the annual budget because invoices expected in fiscal year 2017 arrived in fiscal year 2018. Resources are available and sufficient to cover the shifted cash outflows, and total expenditures and commitments are within the authorized budget.

11. This project is substantially complete. The total cost is expected to be $16.508 million. The project may be closed and financial accounts terminated when final invoices are received and paid.

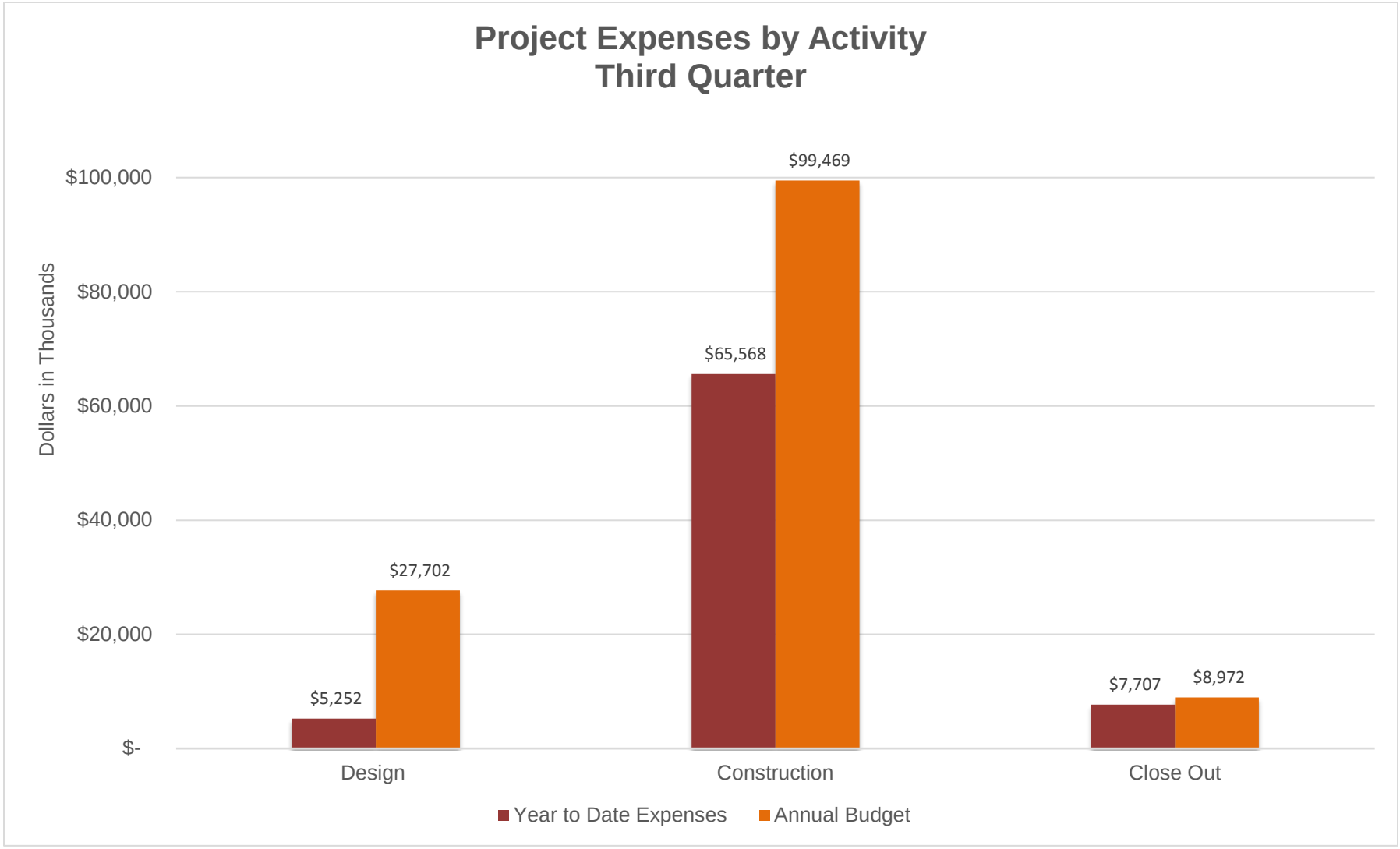
12. This project is substantially complete. The total cost is expected to be $89.4 million. The project may be closed and financial accounts terminated when final invoices are received and paid. Year-to-date expenses exceeded the annual budget because invoices expected in fiscal year 2017 arrived in fiscal year 2018. Resources are available and sufficient to cover the shifted cash outflows, and total expenditures and commitments are within the authorized budget.

13. This project is substantially complete. The total cost is expected to be $7.735 million. The project may be closed and financial accounts terminated when final invoices are received and paid.

RECOMMENDATION:

That the report of income and expenditures for the University Division and the Cooperative Extension/Agricultural Experiment Station Division for the period of July 1, 2017 through March 31, 2018 and the Capital Outlay report be approved.

June 4, 2018


Project Expenses by Activity
Third Quarter
Dollars in Thousands
$100,000
$80,000
$60,000
$40,000
$20,000
$-
$5,252
$27,702
$65,568
$99,469
$7,707
$8,972
Design
Construction
Close Out
Year to Date Expenses
Annual Budget

Financial Performance Report

June 4, 2018

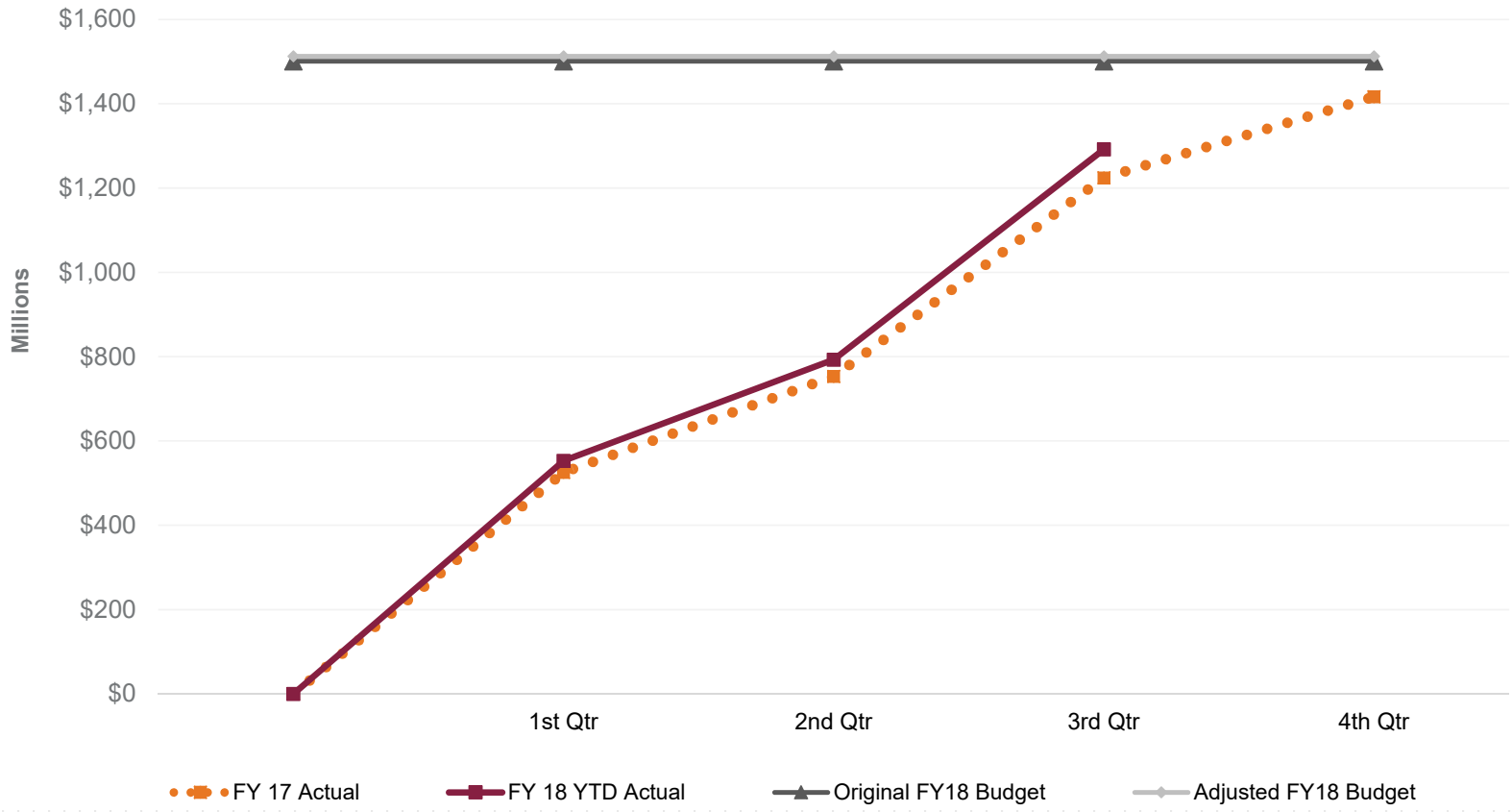
TIM HODGE,
ASSOCIATE VICE PRESIDENT FOR BUDGET AND FINANCIAL PLANNING

BOB BROYDEN,
ASSOCIATE VICE PRESIDENT FOR CAPITAL ASSETS AND FINANCIAL MANAGEMENT

VIRGINIA TECH™

Operating Revenue

2016-17 VS 2017-18



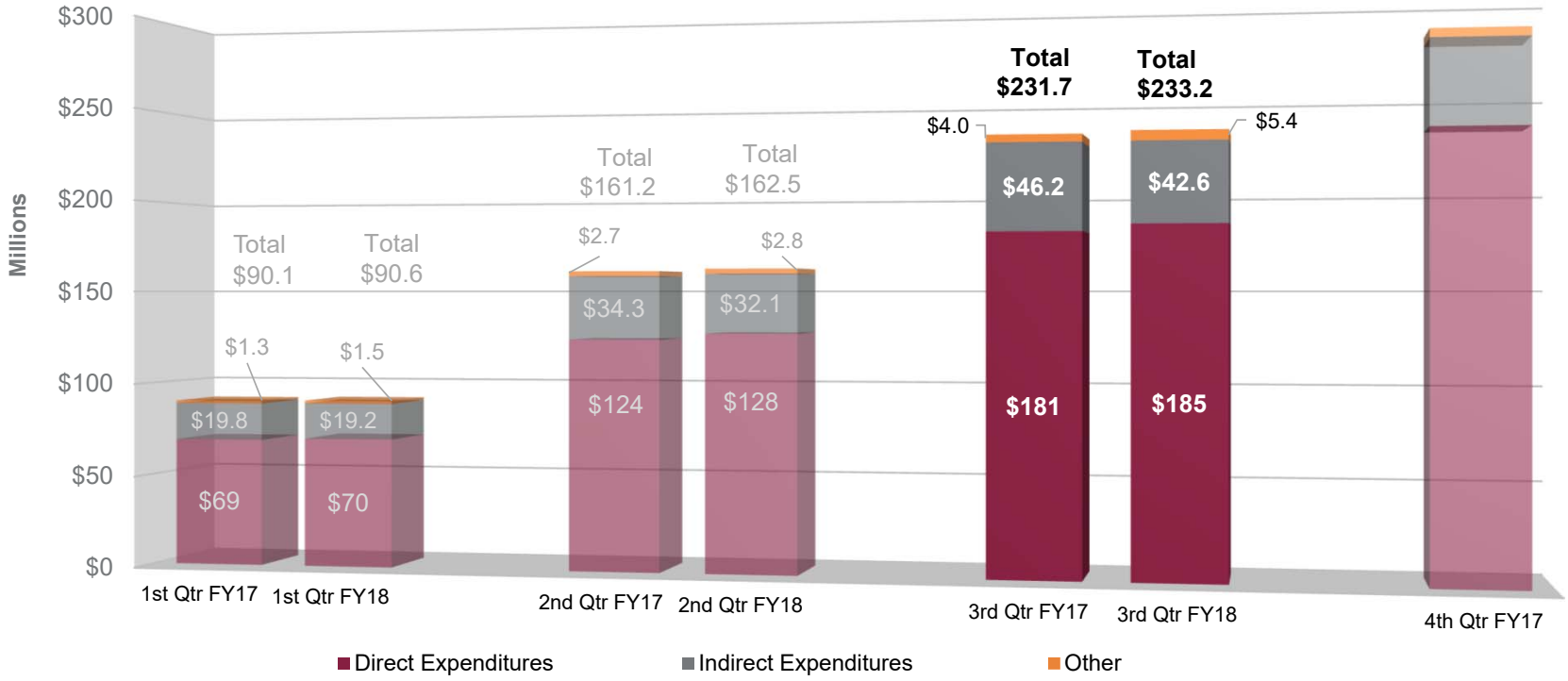
VIRGINIA TECH

Educational & General Budget

- University Division
  - Tuition and Fee: $3.5 million increase for stronger than projected spring retention and winter session activity.
  - Equine Medical Center: $0.2 million increase for higher than projected patient load.
  - Milk and Cattle Sales: $0.1 million increase for stronger than projected self-supporting activity.
  - Virginia Racing Revenue: $0.1 million increase for stronger than projected racing revenue.
- Cooperative Extension/Agricultural Experiment Station (CE/AES)
  - Self-generated revenue: $0.2 million increase for stronger than projected milk, timber and miscellaneous extension revenue.
  - Federal: $0.1 million increase for drawdown of Federal carryover funds.

Sponsored Program Expenditures

2016-17 VS 2017-18



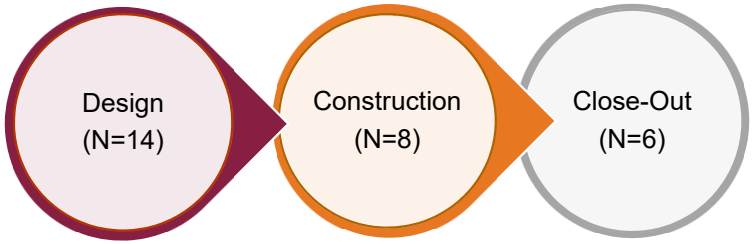
**Other includes Enterprise Funds, Royalty, and Research Ancillary Activity*

VIRGINIA TECH

Auxiliary Enterprises

- Annual Budgets
  - Residential & Dining: increased facility improvements $1.3 million; equipment $0.7 million
  - Printing Services: decreased business volume ($0.8 million)
  - Intercollegiate Athletics
    - Increased Sports Operating $2.6 million; Facility Projects $1.6 million
    - Financial plan in place
- Financial Performance
  - Residence and Dining Halls: higher than budgeted occupancy
  - Telecommunications: lower than projected project volume
  - Electric: lower than projected electricity sales
  - Other activities are performing as planned

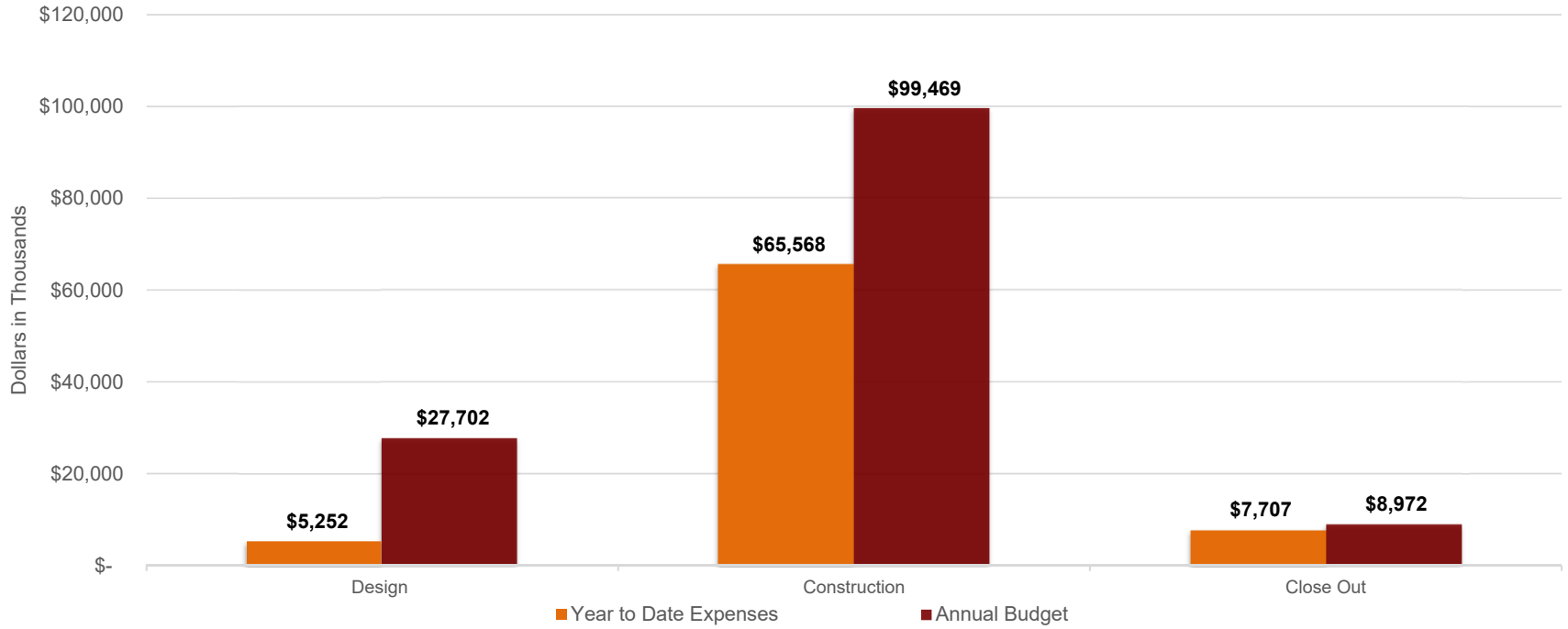
Capital Outlay



- Total capital program level currently authorized
  - $671 million over multiple years
- Cumulative program expenses
  - $257 million inception-to-date
- All spending and commitments are within authorized budgets

Project Expenses by Activity
Third Quarter

(dollars in thousands)



**This graph depicts expenses in each of the separate phases of Design, Construction, and Close Out of the capital projects.*

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Capital Outlay

Planning Activity Underway	Expected Construction
ACC Network Studio	July 2018
Renovate Undergraduate Science Laboratories	July 2018
Improve Kentland Facilities	August 2018
Commonwealth Ballroom Improvements	October 2018
Dietrick First Floor and Plaza Renovation	December 2018
Student-Athlete Performance Center	December 2018
Chiller Plant, Phase II	January 2019
Gas Fired Boiler	January 2019
Student Wellness Improvements	February 2019
Agriculture Production Facilities	February 2019
Holden Hall Renovation	March 2019
Creativity and Innovation Residence Hall	June 2019
Undergraduate Science Laboratory Building	July 2019
Intelligent Infrastructure and Construction Complex	April 2020

Capital Outlay

Major Construction Spending	Expected Occupancy
Athletic Facilities Improvements	April 2018
Academic Buildings Renewal	August 2018
O'Shaughnessy Renovation	August 2018
Lane Substation Improvements	July 2019
Health Sciences and Technology	December 2020

Summary

- Operating Budget
  - On track
- Capital Projects
  - All spending and commitments are within authorized budgets

RECOMMENDATION:

That the report of income and expenditures for the University Division and the Cooperative Extension/Agricultural Experiment Station Division for the period of July 1, 2017 through March 31, 2018 and the Capital Outlay report be approved.

June 4, 2018

Capital Project for Planning the Slusher Hall Replacement

JOINT FINANCE AND RESOURCE MANAGEMENT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

April 24, 2018

The overall instructional mission of Virginia Tech is the "education of the whole person" which recognizes that a significant and important part of student education happens outside of the classroom. Slusher Hall was built in 1972 and is approximately 125,860 gross square feet with housing capacity for about 630 students. The facility has received few improvements since its original construction, does not meet student expectations, carries a significant deferred maintenance backlog, and requires frequent repairs that interrupt services.

Attracting high quality students in higher education is competitive, and the Housing program is often a critical factor for students because of its link to quality of life and academic support. The residential program has a long-range plan for renovations to refurbish its housing stock. Replacing Slusher Hall is the next facility on this plan, and is part of the program for the Residential Renovations of 1000 beds by 2024 included on the university's 2018-2024 Capital Outlay Plan approved by the Board of Visitors on September 17, 2017.

The university has determined, because of Slusher Hall's condition, that the facility should be replaced rather than renovated. To support strategic enrollment growth goals, the university has developed a strategy to ensure maximum bed counts as soon as possible. Under this strategy, the university will first build and occupy a new residential facility neighboring the existing Slusher Hall, then demolish and remove Slusher Hall, and, then build a second building on the site. The total bed count of the new facilities will equal or exceed the existing 630 beds with the intention to maximize the number of beds to the extent practical. The actual size and occupancy of each component will be determined as part of planning activities.

At this time, the university is requesting a $3.5 million planning authorization to prepare design documents through the preliminary design phase. As with all self-supporting projects, the university has developed a financing plan to provide assurance regarding the financial feasibility of this planning project. This funding plan calls for the temporary use of internal cash resources from the Residential Program reserves. This use will be a temporary loan that may be reimbursed as part of a permanent financing package at such time as the entire project moves forward.

Under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has the authority to approve the budget, size, scope, debt issuance, and overall funding of nongeneral fund capital outlay projects. This request is for a $3.5 million planning authorization to complete preliminary design documents for the Slusher Hall Replacement project. A subsequent request for full project funding may be submitted after designs are underway and a firm scope, cost, funding, and schedule for the entire project are determined.

RESOLUTION OF A CAPITAL PROJECT FOR PLANNING THE SLUSHER HALL REPLACEMENT

WHEREAS, Slusher Hall was built in 1972 with a scope of about 125,860 gross square feet and housing capacity for about 630 students; and,

WHEREAS, the facility has received few improvements since its original construction, does not meet student expectations, carries a significant deferred maintenance backlog, and requires frequent repairs that interrupt services; and,

WHEREAS, the university has determined, because of Slusher Hall's condition, that the facility should be replaced rather than renovated; and,

WHEREAS, to support strategic enrollment growth goals, the university has developed a strategy to ensure maximum bed counts as soon as practical; and,

WHEREAS, the university will first build and occupy a new residential facility neighboring the existing Slusher Hall, then demolish and remove Slusher Hall, and, then build a second building on the site; and,

WHEREAS, the total bed count of the new facilities will equal or exceed the existing 630 beds with the intention to maximize the number of beds to the extent practical; and,

WHEREAS, the university is requesting a $3.5 million planning authorization to complete preliminary design documents and to fund the planning project with 100 percent nongeneral fund resources derived from Residential Program auxiliary revenues; and,

WHEREAS, the university may submit a subsequent request for full project funding after designs are underway and a firm scope, cost, funding, and schedule for the entire project are determined; and,

WHEREAS, under the 2006 Management Agreement between the Commonwealth of Virginia and Virginia Tech, the Board of Visitors has authority to approve the budget, size, scope, and overall funding of nongeneral funded major capital outlay projects.

NOW, THEREFORE, BE IT RESOLVED, that the university be authorized to move forward with a $3.5 million planning authorization for the Slusher Hall replacement project.

RECOMMENDATION:

That the resolution authorizing Virginia Tech to plan the Slusher Hall replacement project be approved.

June 4, 2018

Resolution for Planning the Slusher Residence Hall Replacement

June 4, 2018

DWIGHT SHELTON,
SENIOR VICE PRESIDENT FOR OPERATIONS AND ADMINISTRATION-INTERIM

BOB BROYDEN,
ASSOCIATE VICE PRESIDENT FOR CAPITAL ASSETS AND FINANCIAL MANAGEMENT

VIRGINIA TECH™

Resolution for Planning the Slusher Residence Hall Replacement

- The university needs more residential beds to accommodate enrollment growth
- Slusher Hall (630 beds) is the next residential facility to be renewed
- Because of its condition, Slusher should be replaced rather than renovated
- The university can provide a larger facility on the current site

RESOLUTION FOR PLANNING THE SLUSHER RESIDENCE HALL REPLACEMENT

NOW, THEREFORE, BE IT RESOLVED, that the university be authorized to move forward with a $3.5 million planning authorization for the Slusher Residence Hall replacement project.

RECOMMENDATION:

That the resolution authorizing Virginia Tech to plan the Slusher Residence Hall replacement project be approved.

June 4, 2018

Capital Project to Supplement the Dietrick First Floor and Plaza Renovation

JOINT FINANCE AND RESOURCE MANAGEMENT COMMITTEE AND BUILDINGS AND GROUNDS COMMITTEE

April 24, 2018

The Board of Visitors approved the Dietrick First Floor and Plaza renovation project with a $7 million total project cost at its September 11, 2017 meeting. The scope and budget for the project resolution were based on a feasibility study from a consultant and internal reviews. Planning work is underway, and schematic design cost reviews reveal the actual total project costs exceed $7 million for the authorized scope.

The university has reviewed and analyzed each construction cost component of the project at the conclusion of schematic design and determined the total construction costs are $6.8 million. The soft costs for design, project management, inspections, equipment, furnishings, etc. are $1.5 million. Thus, the total project costs inclusive of design, construction, and equipment are $8.3 million. The university has reviewed and analyzed opportunities for cost controls and determined a major scope reduction, either elimination of the plaza improvements or elimination of the enclosure for the seat expansion, would be necessary to remain within the current $7 million project budget.

The full project scope is necessary to meet the needs of the dining program and student expectations. The university has developed a financing plan to support the additional $1.3 million of costs necessary to complete the entire scope of work. The plan calls for the use of supplemental debt that will be serviced from Dining Program auxiliary revenues and will impact dining rates by approximately 0.25 percent.

Under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has the authority to approve the budget, size, scope, debt issuance, and overall funding of nongeneral fund capital outlay projects. This request is for a $1.3 million supplement to adjust the total authorization for the Dietrick First Floor and Plaza Renovation project to $8.3 million.

RESOLUTION OF A CAPITAL PROJECT FOR THE SUPPLEMENT OF THE DIETRICK FIRST FLOOR AND PLAZA RENOVATION

WHEREAS, Dietrick Hall, built in 1970, is the largest food service facility located in the south residential core of campus; and,

WHEREAS, the Board of Visitors approved the Dietrick First Floor and Plaza renovation project with a $7 million total project cost at its September 11, 2017 meeting; and,

WHEREAS, the scope and budget for the project resolution were based on a feasibility study from a consultant as well as internal reviews and planning work is underway and schematic design cost reviews reveal the actual total project costs exceed $7 million for the authorized scope; and,

WHEREAS, the university has reviewed and analyzed each construction cost component of the project at the conclusion of schematic design and determined the total construction costs are $6.8 million; and,

WHEREAS, the soft costs for design, project management, inspections, equipment, furnishings, etc. are $1.5 million; thus, the total project costs inclusive of design, construction, and equipment are $8.3 million; and,

WHEREAS, the university has reviewed and analyzed opportunities for cost controls and determined a major scope reduction, either elimination of the plaza improvements or elimination of the enclosure for the seat expansion, would be necessary to remain within the current $7 million project budget; and,

WHEREAS, the full project scope is necessary to meet the needs of the dining program and student expectations. The university has developed a financing plan to support the additional $1.3 million of costs which calls for the use of supplemental debt that will be serviced from Dining Program auxiliary revenues and will impact dining rates by approximately 0.25 percent; and,

WHEREAS, under the 2006 Management Agreement between the Commonwealth of Virginia and the university, the Board of Visitors has authority to approve the budget, size, scope, debt issuance, and overall funding of nongeneral funded major capital outlay projects.

NOW, THEREFORE BE IT RESOLVED, that the university be authorized to move forward with a $1.3 million supplement to adjust the total project authorization for the Dietrick First Floor and Plaza Renovation project to $8.3 million and to secure temporary short-term financing through any borrowing mechanism that prior to such borrowing has been approved by the Board, as applicable, in an aggregate principal amount not to exceed the $8.3 million authorization, plus related issuance costs and financing expenses.

RECOMMENDATION:

That the resolution authorizing Virginia Tech to supplement and complete the Dietrick First Floor and Plaza Renovation project be approved.

June 4, 2018

Resolution for Dietrick First Floor and Plaza Renovation Supplement

June 4, 2018

DWIGHT SHELTON,
SENIOR VICE PRESIDENT FOR OPERATIONS AND ADMINISTRATION-INTERIM

BOB BROYDEN,
ASSOCIATE VICE PRESIDENT FOR CAPITAL ASSETS AND FINANCIAL MANAGEMENT

VIRGINIA TECH™

Resolution for Dietrick First Floor and Plaza Renovation Supplement

- Schematic designs are complete
- Design-based cost estimates show the total project cost is $8.3 million, or $1.3 million above the initial authorization
- The budget may be managed with a substantial scope cut, or the budget may be supplemented to complete the scope
- The university has a plan to fund the incremental costs and requests to complete the originally envisioned program

RESOLUTION FOR DIETRICK FIRST FLOOR AND PLAZA RENOVATION SUPPLEMENT

NOW, THEREFORE BE IT RESOLVED, that the university be authorized to move forward with a $1.3 million supplement to adjust the total project authorization for the Dietrick First Floor and Plaza Renovation project to $8.3 million and to secure temporary short-term financing through any borrowing mechanism that prior to such borrowing has been approved by the Board, as applicable, in an aggregate principal amount not to exceed the $8.3 million authorization, plus related issuance costs and financing expenses.

RECOMMENDATION:

That the resolution authorizing Virginia Tech to supplement and complete the Dietrick First Floor and Plaza Renovation project be approved.

June 4, 2018

President's Open Session Remarks
BOV Meeting
June 4th, 2018

The close of the 2017-18 academic year was eventful – it was a time for celebration, reflection and remembrance. In May, we lost president emeritus Charles Steger. We have since celebrated his achievements in advancing Virginia Tech as a global land-grant research university. As his successor, I am thankful every day for the tent-poles he raised, and the foundation he solidified.

In May, we also celebrated a year that launched nearly 8,400 graduates. 30,000 attended May commencement exercises to hear the inspiring words of Governor Ralph Northam, and what will be known as his "Save the Baby" speech. He challenged our graduates to step up and take the wheel, and to trust the preparation they have received and earned while at Virginia Tech.

While we reflect on this past academic year, we are also preparing for the next. This fall, we will welcome our most diverse and best-prepared class ever. The pool of talent attracted to Virginia tech is becoming broader and deeper with each cycle, and I appreciate the hard work of our faculty, staff and especially those who work in enrollment management. You are gradually leaking the best kept secret in higher education, and making a Virginia Tech education an aspiration and a reality for many who would not have had this opportunity before.

With the new year, we will also welcome new faculty, staff, graduate students and, of course, the Virginia Tech Carilion School of Medicine as our ninth college.

I am especially looking forward to introducing you all to our Senior Vice President, Dr. Dwayne Pinkney, who will join Virginia Tech on August 1st from UNC-Chapel Hill.

The General Assembly session in Richmond is now almost complete, and I am pleased to report that Virginia Tech fared well, especially considering that the needs of higher education were in competition with the desire to enhance the rainy day fund to maintain top bond ratings for the commonwealth. The result was that the first year of the biennium will see us lose ground in appropriated General Funds per enrolled in-state student in real dollars, with promise for at least partial recovery in the second year. A combination of enrollment growth, increased philanthropy, and improved productivity will allow us to bridge gracefully through next year, while restricting growth of tuition and mandatory fees for in-state undergraduates to 2.9% for the third year in a row.

The General Assembly session brought two significant advances for which Virginia Tech had positioned itself well. The first is the Commonwealth Cyber Initiative, which is funded at the level of $5M in the first year and $20M in the second year. Virginia Tech has been asked to lead this statewide effort to address research opportunities, business creation and workforce development at the confluence of data, security and autonomy. Virginia is rich in assets in this

emerging domain - in its universities, its burgeoning technology industry and in the federal government. We are now in a position to help organize, coordinate and diversify this foundational confluence for the benefit of Virginia and the world.

Virginia Tech is in this position because of the world-class people and programs in its institutes, destination areas, departments and colleges. The Hume Center for National Security led by Charles Clancy, the Virginia Cyber Range, the Virginia Tech Transportation Institute, The Institute for Critical Technology and Applied Science, the Mid-Atlantic Aviation Partnership, the Integrated Security Destination Area, the Intelligent Infrastructure for Human-Centered Communities Destination Area, the Data and Decisions Destination Area, and LINK, our business engagement center, are all right at the core of our strength at the confluence represented by The Commonwealth Cyber Initiative.

Reflecting on a conversation I had last year with our leadership team, we will look back at this time as the era of **collective autonomy**, when networks of machines and networks of people learned to work together to make better decisions. Either we will do this right, or we will make some tragic mistakes of great consequence to humanity. This is exactly why we created Destination Areas at Virginia Tech, transdisciplinary platforms for research, learning and engagement that bring a human perspective into fields that have been enabled by science and technology. We first ask, how can we improve the human condition? No technology can succeed without consideration of how that technology will be used by humans, and how society will benefit. The Commonwealth Cyber Initiative is not about cybersecurity – building a better firewall. It is about bringing people and machines together to affect positive change in the quality of life for everyone.

Although the beginnings of the Commonwealth Cyber Initiative will by modest – a hub in northern Virginia, with spokes out to centers of excellence around the Commonwealth, don't be deceived by the $25M figure. We expect that the investment in the Commonwealth Cyber Initiative will exceed $300M from all partners in the first five years, and will grow exponentially thereafter. The state is catalyzing the first stage of this initiative.

The second feature of the biennial budget that is new and aligned with Virginia Tech's priorities is the authorization of financial support for internships through SCHEV, the Commonwealth Cyber Initiative and the allocation of state financial aid through our universities. Working with our partners at the Virginia Business-Higher Education Council (our rector, Dennis Treacy is on the Board), we have strived to elevate the concept of VT-shaped learning to a statewide effort to ensure that all of our students have the opportunity to participate in experiential learning that reinforces what they learn on campus, reduces debt and prepares them with the skills they need to transition into a successful career. With state support, we have a better opportunity to keep talent in Virginia by building pathways between our universities and employers operating out of Virginia. I am challenging our Virginia Tech faculty and staff to use this opportunity to lead the way toward the Beyond Boundaries vision of the undergraduate experience at Virginia Tech.

Finally, I would like to recognize those BOV members whose terms are expiring at the end of this month: Mike Quillen, Wayne Robinson, Mehul Sanghani and Horacio Valeiras. Each of you has contributed a unique and valuable perspective that has irreversibly altered and elevated Virginia Tech's aspirations for the future. Thank you! And while three of you are eligible for a second term – I understand we will hear from the governor soon – one of you is not. Mike, thank you for onboarding me as my first rector. Your guidance in those first weeks, and ever since, has helped me understand the life-blood of this great institution. Your love for Virginia Tech and for the communities of southwest Virginia is inspiring, and we look forward to your leadership as a partner and collaborator going into the future.

This concludes my report.

End of Year Report
June 3-4, 2018
Board of Visitors Meeting

Seyi Olusina

Undergraduate Student Representative to the Board of Visitors

VIRGINIA TECH

Report Overview

- 2017-2018 Highlights and Improvements
- Future needed improvements and things to look into
- Discussion with, and survey of undergraduate students in five colleges
- What's next?

2017-2018 Highlights and Improvements

- The undergraduate BOV rep position
- Over-enrollment of undergraduate students for the 2017-2018 year
- Giving at Virginia Tech
- Diversity of students
- Athletics

Future Needed Improvements and Things To Look Into

- Needed Improvements
  - Diversity
  - Communication with Students
- Things to look into
  - Internal Integrity

Survey and Discussions with Undergraduate Students

- **WHO:** Students in five colleges
  - College of Science
  - Pamplin College of Business
  - College of Liberal Arts and Human Sciences
  - College of Natural Resources and Environment
  - College of Engineering
- **WHEN:** Throughout the month of April 2018
- **HOW:** Group meetings with student leadership in each college, with an average of 15 students in each group

- College of Architecture and Urban Studies and College of Agriculture and Life Science were not a part of the surveys

Survey of Undergraduate Students in Colleges (cont.)

Pamplin College of Business (Dean's Student Advisory Council)

- How They Have Improved
  - Advising has improved
  - The dean is now more visible to students
- Needed Improvements
  - Classes should be more career focused and applied
  - Encouragement of study abroad experiences
  - More utilization of university Career and Professional Services Center
- Positive Experiences
  - University Career and Professional Services Center helps almost all students who are looking, get jobs
- Negative Experiences
  - There is not much room to study something else outside of the college
  - There are not freshman experience classes in every department

Survey of Undergraduate Students In Academic Colleges (cont.)

College of Natural Resources and Environment (CNRE Student Council)

- Needed Improvements
  - Better way to transport students to classes at the CRC
  - Grow the meteorology department
- Negative Experiences
  - There isn't really any opportunity to study abroad for a semester and cost of the few trips offered is very high
- Positive Experiences
  - Small class sizes
  - Classes are very hands-on and career applicable
  - incoming students have orientation with the deans and department heads
  - Career fair for just the college helps students get jobs

Survey of Undergraduate Students In Academic Colleges (cont.)

College of Liberal Arts and Human Sciences (CLAHS Ambassadors)

- Needed Improvements
  - Better advertising and promotion of the college for all they do and accomplish
  - More study abroad funding because it was just cut
  - More diverse job opportunities at the college job fair
  - Recruit students in high school to some of the smaller departments
  - Bring back concentration in Human Development
- Positive Experiences
  - Class sizes tend to be smaller
  - There is good mix of general advisors and faculty advisors
- Negative Experiences
  - Classes are cut because not enough students sign up for classes

Survey of Undergraduate Students In Academic Colleges (cont.)

College of Engineering (Student Engineers' Council)

- How They Have Improved
  - Center for Enhancement of Engineering Diversity (CEED) supports minority students
- Needed Improvements
  - A bigger space is needed to hold the EXPO
  - Better class sizes and multiple sections of classes
  - The curriculum needs to be collaborative within the college and outside
  - The execution of early engineer classes is not up to par
- Positive Experiences
  - Career Services helps almost all students, who are looking, get jobs
- Negative Experiences
  - There is not much room to study something else outside of the college
  - There are not freshman experience classes in every department

Survey of Undergraduate Students In Academic Colleges (cont.)

College of Science (Dean's Leadership Council)

- Needed Improvements
  - Improve teaching in selected departments
  - More consistent advising and more advisors
  - Career Fair for the college
  - A central student space for the college
  - Advisors who can help with decisions outside of just that department
- Positive Experiences
  - Biochemistry advising is very beneficial
- Negative Experiences
  - Co-teaching does not work well for students
  - Not very diverse in any department except for economics
  - Physics department is underfunded.

What is Next?

For me

- This summer I have an internship as a Health Information Technology Intern in San Antonio, Texas. I will then be attending UNC Chapel Hill, in fall, to pursue my Masters in Health Care Administration.

For the Position

- Rachel Iwicki will be the next BOV Rep
- The surveys of undergraduate students will be done at least once an academic year and reported back

Questions?

Constituency Report
Brett R. Netto
Graduate Student Representative to the Virginia Tech Board of Visitors
June 3, 2018

Good afternoon Rector Treacy, President Sands, distinguished members of the Board of Visitors, administrators, and guests. I have decided not to make this a typical end-of-the-year report focusing on what we have accomplished and what we have not accomplished. Virginia Tech has made progress in multiple areas this past academic year but we know there is always room to continuously improve and to take on new initiatives.

Our prestigious university has sent forth a new group of alumni into the world. At the Graduate School commencement in May, approximately 150 PhDs were hooded and 620 Masters degrees were awarded. This is the largest number of graduate students that have participated in the graduate commencement. Some of the graduate students from Northern Virginia travelled to Blacksburg to participate in the festivities.

Obviously, graduate students will continue to be concerned about the usual perennial issues like parking, stipends, insurance, and their voice within shared governance at Virginia Tech. The Graduate Student Assembly has elected their new officers for AY 2018-2019, who will remain vigilant in recognizing the needs of graduate students. At this time, they have not set any agenda for what they want to accomplish next year as they wish to remain flexible because they know that the life of graduate students changes daily.

Due to the length of time in which I hold this position, this is my last meeting with all of you. While my time has been brief, I have learned so much from each of you that I will take forward and implement into my life. My time here at Virginia Tech has allowed me to wear different hats, but I have definitely learned to wear the hat of the student through this position.

Being the graduate student representative has been an honor and I want to thank all of the Board and the university administration for allowing me to work alongside you in the spirit of Ut Prosim. I hope that I have lived up to your expectations and appropriately represented graduate students to you in this position. Again, thank you for the opportunity.

You are in good hands with my successor, Zo Amani. I am eager to see the exciting things he will do during his year in the position. When you first meet Zo, you immediately see his passion for Virginia Tech and the graduate students that he represents. His charisma is infectious and his smile is welcoming. The Board has made an excellent choice for next year's graduate student representative.

Even though I am leaving the Blacksburg area, the past four years have shown me why Virginia Tech students and alumni consistently say "This is Home." I will remain involved with Virginia Tech as I will still be enrolled as a student writing my dissertation from afar. My wife, Libbie, and I are moving back to

New Orleans, our familial home. She will be the CEO of the non-profit she worked for prior to our arrival at Virginia Tech. My main concern will be my dissertation but I will also be an adjunct instructor at my undergraduate alma mater, the University of New Orleans, with an eventual tenure track position at the university once I finish my PhD. The University of New Orleans is a majority minority institution and my hope is to have the Privateers with whom I interact will become future Hokies as graduate students. For the Board and the administrators I have worked with, thank you again for the relationships we have forged during my time at Virginia Tech and in this position. If you ever find yourselves in New Orleans or have the desire to visit the wonderful city I call home, please reach out to me. There will always be room at our inn. Thank you again.

Staff Senate Constituency Report
Virginia Tech Board of Visitors
June 3, 2018
Presented by Robert Sebek, Staff Senate President

Good afternoon Rector Treacy, members of the Board of Visitors, President Sands, administrators and distinguished guests. It is an honor to present to you updates from staff at Virginia Tech.

Staff Senate held its annual James McComas Leadership Seminar where 200 staff members from across the university spent the day at The Inn hearing about the benefits of mentoring, both as a mentee and serving as a mentor. This program honors former President McComas's support of staff throughout his tenure. Several speakers discussed how to improve the whole person through a relationship with a mentor. We greatly appreciate the financial support of the Division of Human Resources and the President's Office to enable us to put on this program.

The Senate has been gathering feedback on the proposed mission, vision, and core values that will guide the university's new strategic plan. We have enlisted the aid of staff associations representing many areas of the university to channel comments to our representative on the strategic plan committee.

We continue to investigate improving access to affordable child care, hearing from several stakeholders in a presentation to the Senate, researching programs and benefits at other universities and corporations, and listening to the needs of parents at the university.

Finally, over a thousand staff members participated in this year's Staff Appreciation Day in Owens Dining Hall, eating lunch, enjoying tours around campus, and participating in bingo and Family Feud games. We're thankful for the administrators and faculty who served meals and hosted games during the afternoon. I've heard a lot of positive responses about the food and activities and would like to thank the President's Office and Human Resources again for their backing.

Respectfully submitted,

Robert Sebek
President, Staff Senate

Faculty Constituent Report
Virginia Tech Board of Visitors
June 3, 2018
Hans Robinson, President—VT Faculty Senate

Good afternoon Rector Treacy, President Sands, members of the Board, Provost Clarke, and all others gathered here today.

Thinking back to the many discussions I've been party to in and out of the Faculty Senate in recent years, the one recurring topic that sticks out is the proliferation of demands on faculty time that have no direct bearing on our work as scholars and teachers. It seems that every year, the list of obligation is lengthened by another training we must attend, another assessment we have to perform, another form we need to fill out, another report are obliged to prepare for the latest university-wide initiative. The recent introduction of EFARS is only the most significant recent example of a novel drain on faculty time, but there are many others, each I'm sure laudable in isolation, but taken together amounting to an increasingly large bite out of the typical Virginia Tech faculty member's workweek.

Faculty time is arguably the most valuable resource the university has, since it is required for all the core activities of the university. Without faculty spending the time, no courses are taught, no research is performed, and no papers or books are written. It's also a fully subscribed resource. Contrary to what many outside of academia may believe, university faculty work hard—nearly 60 hours a week on average, year round, although most of us only get paid for nine months of work. With this in mind, it is worth noting that research into human productivity shows that increasing work hours beyond about 55 or 60 per week actually leads to a decrease in productivity over the long haul. In other words, for every additional task that you assign faculty, there is something else that will be done less well, or not at all.

The opportunity cost of all the administrative demands on faculty is in other words large, and made even larger by to the way in which faculty work. If you do administrative or managerial work, you can readily divide your day into half-hour chunks, assign each to a different task or meeting, and be successful at what you do. Creative work, on the other hand, requires long stretches of uninterrupted time—I my I believe not atypical case four hours at least—to be effective. In other words, you can schedule a half-hour meeting with me at 10 in the morning, and another at 2:30 in the afternoon, and while you have directly taken up only an hour of my time, as far as creative work is concerned, the entire day is gone.

Now, it is true that tedious chores that don't make use of your full talents are an inescapable part of life. For instance, I suspect that if I were to argue that I shouldn't do the laundry or the dishes because that is a waste of my Ph.D.-level talents, it would not go over too well with my wife. However, while we cannot completely avoid laundry duty, the value and scarcity of faculty time would seem to dictate that a concerted effort should be made to at least minimize our time with the dirty-clothes hamper.

But this doesn't appear to be happening. On the contrary, as a faculty member you sometimes get the impression that others think of your time as an all but unlimited resource that can be assigned to sundry tasks as needed, free of charge. I can understand why this attitude exists. There is simply no mechanism for measuring the true cost of assigning additional work to faculty, or for assessing how much time we actually spend on secondary tasks. But perhaps the time has come to compile a measure of this. As I discussed at the last board meeting, faculty is the subject of a rapidly growing number of metrics that aim to measure various aspects of what we do, including some things that are objectively extremely tricky to measure, such as the overall impact of the university's scholarship, or the quality and value of the instruction that we offer our students.

If the administration thinks that strengthening Virginia Tech requires us to try to perform such challenging measurements, each of which incidentally requires a significant investment of faculty time to realize, I submit that we should also go after some of the more low-hanging fruit. Such as identifying what can be done to increase the amount of time that faculty is able to spend on teaching and scholarship, i.e. on the things we do best, on the things we were hired to do.

The Faculty Senate is ready to do our part in this effort. We are about to launch the Faculty SoundBoard, a permanent survey open to Virginia Tech faculty, where they can anonymously discuss issues they would like to see addressed and make suggestions for improvements in policies and procedures at the university. This could be one tool for identifying inefficiencies and poor use of faculty time. In addition, John Ferris, the incoming Faculty Senate president, will make this topic a priority for the upcoming year. I hope that the Administration will be able to partner with us in this effort. If you do, I can promise you that not only will we be able to deploy the faculty's time more effectively, it will send the message that the university values and respects its faculty, and the resulting improvement in morale will pay dividends well beyond any direct gains in faculty effort spent on instruction and on scholarship.

Thank you.

SUMMARY

Emeritus or Emerita Faculty Resolutions (4)

June 4, 2018

College of Engineering (1)

Scott L. Hendricks	Associate Professor Emeritus of Engineering Science and Mechanics

College of Liberal Arts and Human Sciences (2)

David F. Crane	Professor Emeritus of Fine Art
Charles Lewis Taylor	Professor Emeritus of Political Science

Administration (1)

S. Richard Turner	Director Emeritus of the Macromolecules Innovation Institute and Research Professor

RESOLUTION FOR EMERITUS STATUS

WHEREAS, for 38 years, Scott L. Hendricks, Ph.D. faithfully served Virginia Tech as a faculty member in the Department of Biomedical Engineering and Mechanics in the College of Engineering; and

WHEREAS, he made significant contributions to the Department of Engineering Science and Mechanics and its successor, the Department of Biomedical Engineering and Mechanics; and

WHEREAS, he ably served the department community as engineering science and mechanics program chair; and

WHEREAS, with dedication, he taught a wide variety of undergraduate and graduate courses ranging across the engineering mechanics curricula, placing strong emphasis on standards and student learning; and

WHEREAS, that his instructional excellence was recognized through certificates of teaching excellence, the Dean's Award for Teaching, and the W.S. (Pete) White Chair for Innovation in Engineering Education; and

WHEREAS, he advised numerous students on master's and doctoral dissertations and helped them develop successful careers in both academic and industrial settings; and

WHEREAS, he provided many years of distinguished contributions to the department, college, and university through dedicated service on numerous committees;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Visitors recognizes Scott L. Hendricks, Ph.D. for his distinguished service to the university with the title Associate Professor Emeritus of Engineering Science and Mechanics.

RECOMMENDATION:

That the above resolution recommending Scott L. Hendricks, Ph.D. for emeritus status be approved.

June 4, 2018

RESOLUTION FOR EMERITUS STATUS

WHEREAS, for 37 years, David Crane, MFA faithfully served Virginia Tech as a faculty member in the Department of Art and Art History, later the School of Visual Arts in the College of Architecture and Urban Studies; and

WHEREAS, he made significant contributions to creativity and innovation and through his work in ceramics; and

WHEREAS, he ably served the community as an arts organizer and served the department and school as chair; and

WHEREAS, he supported the establishment of a professional bachelor of fine arts degree; and

WHEREAS, with dedication, he taught a wide variety of undergraduate courses ranging across the studio arts curriculum, placing strong emphasis on standards and student learning; and

WHEREAS, he advised numerous students on their capstone projects and helped them develop successful careers in both academic and art world settings; and

WHEREAS, he provided many years of distinguished contributions to the department, college, and university through dedicated service on numerous committees;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Visitors recognizes David Crane, MFA, for his distinguished service to the university with the title Emeritus Professor of Fine Art.

RECOMMENDATION:

That the above resolution recommending David Crane, MFA for emeritus status be approved.

June 4, 2018

RESOLUTION FOR EMERITUS STATUS

WHEREAS, for 48 years, Charles Lewis Taylor, Ph.D., faithfully served Virginia Tech as a faculty member in the Department of Political Science in the College of Liberal Arts and Human Sciences; and

WHEREAS, he made significant contributions to the study of International Relations through his work on analyzing political and social stability across nation-states, focusing on developing quantitative indicators of political and social conditions as well as on methodological techniques for employing such data; and

WHEREAS, he ably served the community as head of the Department of Political Science and as director of the international studies program; and

WHEREAS, he was instrumental in creating the international studies program and supported his department through service as director of undergraduate studies and undergraduate advisor, for which he won the Alumni Award for Excellence in Academic Advising, and

WHEREAS, with dedication, he taught a wide variety of undergraduate and graduate courses, ranging across the political science and international studies curricula, as well as seminars in the university honors program; and

WHEREAS, he advised numerous students on doctoral dissertations, masters' theses and honors' theses and helped them to develop successful careers in both academic and nonacademic settings; and

WHEREAS, he provided many years of distinguished contributions to the department, college, and university through dedicated service on numerous committees;

NOW, THEREFORE, BE IT RESOLVED, that the Board of Visitors recognizes Charles Lewis Taylor, Ph.D., for his distinguished service to the university with the title Professor Emeritus of Political Science.

RECOMMENDATION:

That the above resolution recommending Charles Lewis Taylor, Ph.D., for emeritus status be approved.

June 4, 2018

RESOLUTION FOR EMERITUS STATUS

WHEREAS, for 13 years, S. Richard Turner, Ph.D. faithfully served Virginia Tech as a faculty member in the Department of Chemistry in the College of Science; and

WHEREAS, he served as the first director of the Macromolecules and Interfaces Institute (MII, now the Macromolecules Innovation Institute) for 10 years and was recognized at all levels of the university for unifying the dispersed programs in macromolecular science and engineering, and leading MII to enhanced national and international recognition; and

WHEREAS, during Dr. Turner's tenure as director, MII was invited to host the International Union's Pure and Applied Chemistry premier biennial symposium in macromolecular science and engineering. Over 1,500 delegates, (60% international) attended this on-campus symposium. Dr. Turner led a successful fund-raising thrust for this symposium with approximately $350K contributions, mainly from industrial sources; and

WHEREAS, he has served since 2005 as an editor of Polymer, one of the highest ranked journals in the field of macromolecular science; and

WHEREAS, he was elected in 2004 as a Fellow of the American Chemical Society in its charter class. Dr. Turner was also elected as a Fellow of the Division of Polymer Chemistry and a Fellow of the Division of Polymeric Materials: Science and Engineering of the American Chemical Society; and

WHEREAS, he developed a highly successful independent internationally recognized research program in polymer chemistry, and advised 11 Ph.D. student and 3 master's students. Dr. Turner achieved over $3M in external research funds from industrial and agency sources; and

WHEREAS, he served the academic mission of Virginia Tech by teaching polymer chemistry courses in MII and the Department of Chemistry, and developing and teaching a highly acclaimed course in the Graduate School for 10 years titled "Future Industrial Professional in Science and Engineering," based on his industrial experiences before joining Virginia Tech; and

WHEREAS, he served on many department and university committees including six years as a member of the Advisory Board of the Virginia Tech Intellectual Properties, Inc.

NOW, THEREFORE, BE IT RESOLVED, that the Board of Visitors recognizes S. Richard Turner, Ph.D. for his distinguished service to the university with the title Director Emeritus of the Macromolecules Innovation Institute and Research Professor.

RECOMMENDATION:

That the above resolution recommending S. Richard Turner, Ph.D. for emeritus status be approved.

June 4, 2018

SUMMARY

New Appointments to Endowed Chairs, Professorships, or Fellowships (1)

June 4, 2018

College of Engineering (1)

Vinod Lohani	W.S. “Pete” White Chair for Innovation in Engineering Education

ENDOWED PROFESSORSHIP
W. S. “Pete” White Chair for Innovation in Engineering Education

The W.S. "Pete" White Chair for Innovation in Engineering Education was established by the generous gift of $500,000 by American Electric Power. The creation of this chair, in honor of Pete White (EE '48), enables Virginia Tech to generate new interest in the teaching of engineering and in improving the learning process. It is unique in its flexibility—the chair is rotated biennially to a new recipient. Dean Julia Ross has nominated Professor Vinod Lohani as the W.S. "Pete" White Chair, based on the recommendations of the Department of Engineering Education and the College of Engineering's Honorifics Committee.

Dr. Lohani has excelled at scholarship, teaching, service, and outreach at Virginia Tech. Through his innovative teaching methods based on interactive classroom instruction technologies combined with hands on learning experiences, he has impacted hundreds of students across a wide range of programs in the College of Engineering. With 16 NSF funded projects and a cumulative research income of $6.4M, Dr. Lohani’s research activity underpinning this educational innovation has been equally impressive.

Dr. Lohani founded the Learning Enhanced Watershed Assessment System (LEWAS) Lab at Virginia Tech, which conducts sophisticated water quality and weather monitoring on campus in real-time. Learners and students are able to access these data through an interactive database, and thus are able to engage in exciting work in environmental and engineering education. This lab is used by students in several departments across the college; in total it has been used in more than 26 courses at Virginia Tech and beyond. It has also supported a number of research projects involving an ever-growing community of graduate students.

Dr. Lohani now holds the position of Director for Education and Global Initiatives at the Institute for Critical Technology and Applied Science (ICTAS) which has allowed him to take the impact of his work to a new level, especially in building connections at the K-12 level. The impact of Dr. Lohani’s innovative work in engineering education has been recognized by numerous awards, the full list of which is impressive. Notably, Dr. Lohani was the first person in the college to receive Virginia Tech’s Scholarship of Teaching and Learning Award, in 2013.

He is commended for work at both the course and curriculum level. His work exemplifies a hands-on approach to engineering education and shows an impressive and ongoing uptake of the most recent technologies in the field, allowing students to engage with up to date and exciting engineering experiences. Dr. Lohani’s energy and creativity is evident across this diverse portfolio of work, and his strong publication record has allowed this impact to spread beyond the institution to further afield in the Commonwealth of Virginia and the nation.

RECOMMENDATION:

That Professor Vinod Lohani be appointed to the W.S. "Pete" White Chair for Innovation in Engineering Education effective for a period of two years beginning August 10, 2018, with a salary supplement as provided by the endowment and, if available, with funds from the eminent scholars match program.

June 4, 2018

SUMMARY

Exception to the Virginia Conflict of Interests Act (2)

College of Science (2)

Neil Hauenstein	Psychology Department
Candace Wall	Department of Chemistry

EXCEPTION TO THE VIRGINIA CONFLICT OF INTERESTS ACT

WHEREAS, the Code of Virginia section 2.2-3106, places prohibitions on an employee from supervising a member of his or her immediate family; and

WHEREAS, Dr. Roseanne Foti has been offered the position as chair of the Psychology Department in the College of Science and her spouse, Dr. Neil Hauenstein, is a faculty member in the department; and

WHEREAS, Dr. Foti has agreed she will not participate in, nor have influence over, decisions related to Dr. Hauenstein's annual evaluation, recommendation for merit increase, or other personnel related decisions; now

THEREFORE, BE IT RESOLVED, that Dr. Neil Hauenstein be evaluated using the department's usual process, overseen by Dr. Sally Morton, dean of the College of Science, and that Dr. Hauenstein's final evaluation will be reviewed and approved by the executive vice president and provost; and

BE IT ALSO RESOLVED, that Dr. Foti will not be supervised, evaluated, or overseen in relation to other personnel decisions by Dr. Hauenstein.

RECOMMENDATION:

That an exception to the Conflict of Interests Act be granted by the Board of Visitors as provided by the Code of Virginia with appropriate safeguards for the supervision of Dr. Hauenstein during the time in which his spouse serves as department chair.

June 4, 2018

EXCEPTION TO THE VIRGINIA CONFLICT OF INTERESTS ACT

WHEREAS, the Code of Virginia section 2.2-3106, places prohibitions on an employee from supervising a member of his or her immediate family; and

WHEREAS, Dr. Alan Esker has been offered the position as chair of the Department of Chemistry in the College of Science and his spouse, Candace Wall, occasionally serves as a temporary instructor in the department; and

WHEREAS, Dr. Esker has agreed he will not participate in, nor have influence over, decisions related to Ms. Wall's hiring decisions or other personnel related decisions; now

THEREFORE, BE IT RESOLVED, that Ms. Candace Wall be recommended for teaching positions and other personnel decisions by Dr. Patricia Amateis, associate professor and director of undergraduate programs in the Department of Chemistry, and Dr. John Morris, professor and graduate program director in the Department of Chemistry, and that final hiring decisions will be made by Dr. Sally Morton, dean of the College of Science, or her designee; and

BE IT ALSO RESOLVED, that Ms. Wall will not be supervised, evaluated, or overseen in relation to other personnel decisions by Dr. Esker.

RECOMMENDATION:

That an exception to the Conflict of Interests Act be granted by the Board of Visitors as provided by the Code of Virginia with appropriate safeguards for the supervision of Ms. Wall during the time in which her spouse serves as department chair.

June 4, 2018

SPECIAL FACULTY RESEARCH LEAVE REQUEST

Virginia Tech provides tenured faculty, and faculty on continued appointment, with opportunities that include paid leave for intensive study or research that advances the individual's profession and contributions to the university.

The following faculty member is requesting a special research leave (partial salary for one semester) for the purpose and period of time specified:

Lyon, Eric, associate professor of practice in the School of Performing Arts, academic year 2018-19; to utilize a Guggenheim Foundation Fellowship to write a set of compositions that expand the possibilities of integrating acoustic instrumental performance with both interactive and digital sound processing, and immersive audio specialization. (Blacksburg, VA)

RECOMMENDATION:

That the above research assignment leave be approved as requested.

June 4, 2018

Faculty Personnel Changes Report

ACADEMIC, RESEARCH, AND STUDENT AFFAIRS COMMITTEE AND FINANCE AND RESOURCE MANAGEMENT COMMITTEE

Quarter ending March 31, 2018

The Faculty Personnel Changes Report includes new appointments and adjustments in salaries for the general faculty, including teaching and research faculty in the colleges, and for administrative and professional faculty that support the university including the library, extension, academic support, athletics, and administration. The report is organized by senior management area (college or vice presidential area).

Since the last Board meeting, the university has made the following faculty personnel appointments and salary adjustments:

Teaching and Research Faculty	
New Appointments with Tenure or Continued Appointment	5
New Appointments to Tenure-Track or Continued Appointment-Track	28
New Appointments to Non-Tenure Track	0
Adjustments in Salary	5
One-time payments	0
Administrative and Professional Faculty	
New Appointments	14
Adjustments in Salary	46
One-time payments	7
One-time payments for Post-Season Sports Events	0
Research Faculty	
Adjustments in Salary	1

RECOMMENDATION:

That the Board ratify the Faculty Personnel Changes Report

June 4, 2018

FACULTY PERSONNEL CHANGES
June 4, 2018

TEACHING AND RESEARCH FACULTY

NEW APPOINTMENTS

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
Agriculture & Life Sciences								
Allen, Kylie Dawn	Assistant Professor	Biochemistry	Reg	9	10-Aug-18	100	$ 83,000	
Entrekin, Sally	Associate Professor - Tenured	Entomology	Reg	9	10-Aug-18	100	$ 96,000	
Jutras, Brandon	Assistant Professor	Biochemistry	Reg	9	1-Mar-18	100	$ 80,000	
Architecture & Urban Studies								
Bredenkamp, David	Assistant Professor	School of Public & International Affairs, CPAP	Reg	9	10-Aug-18	100	$ 78,000	
Levinson, Chad	Assistant Professor	School of Public & International Affairs, GIA	Reg	9	10-Aug-18	100	$ 80,000	
Business								
Awate, Kiran	Assistant Professor	Management	Reg	9	10-Aug-18	100	$ 170,000	
Kumar, Pankaj	Assistant Professor	Management	Reg	9	10-Aug-18	100	$ 170,000	
Lowry, Michelle	Assistant Professor	Accounting and Information Systems	Reg	9	10-Aug-18	100	$ 220,000	
Mindel, Vitali	Assistant Professor	Business Information Technology	Reg	9	10-Aug-18	100	$ 180,000	
Stallkamp, Maximilian	Assistant Professor	Management	Reg	9	10-Aug-18	100	$ 170,000	
Zach, Florian	Assistant Professor	Hospitality & Tourism Management	Reg	9	10-Aug-18	100	$ 125,000	
Engineering								
Brand, Alexander	Assistant Professor	Civil & Environmental Engineering	Reg	9	10-Aug-18	100	$ 94,000	
Cai, Wenjun	Assistant Professor	Materials Science & Engineering	Reg	9	10-Aug-18	100	$ 97,000	
Grant, Stanley	Professor - Tenured	Civil & Environmental Engineering	Reg	12	1-Jul-18	100	$ 244,000	
Rippy, Megan	Assistant Professor	Civil & Environmental Engineering	Reg	9	10-Aug-18	100	$ 94,000	
Liberal Arts& Human Sciences								
Baldwin, Andrea	Assistant Professor	Sociology	Reg	9	10-Aug-18	100	$ 68,000	
Choi, Koeun	Assistant Professor	Human Development	Reg	9	10-Aug-18	100	$ 64,000	
Demmer, Amanda	Assistant Professor	History	Reg	9	10-Aug-18	100	$ 65,000	
Duncan, Megan	Assistant Professor	Communication	Reg	9	10-Aug-18	100	$ 64,000	
Gill, Bikrum Singh	Assistant Professor	Political Science	Reg	9	10-Aug-18	100	$ 68,000	
Klausmeyer, Bryan	Assistant Professor	Modern and Classical Languages & Literatures	Reg	9	10-Aug-18	100	$ 63,000	

continued

TEACHING AND RESEARCH FACULTY

NEW APPOINTMENTS

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
Kovaka, Karen	Assistant Professor	Philosophy	Reg	9	10-Aug-18	100	$ 65,000	
Mueller, Derek	Associate Professor - Tenured	English	Reg	9	10-Aug-18	100	$ 85,000	
Oilphant, Tameka	Assistant Professor	School of Education	Reg	9	10-Aug-18	100	$ 67,000	
Poets, Desiree	Assistant Professor	Political Science	Reg	9	10-Aug-18	100	$ 65,000	
Reeves, Audrey	Assistant Professor	Political Science	Reg	9	10-Aug-18	100	$ 65,000	
Russon, Jody	Assistant Professor	Human Development	Reg	9	10-Aug-18	100	$ 66,000	
Taylor, Jessica	Assistant Professor	History	Reg	9	10-Aug-18	100	$ 63,500	
Zhao, Tingting	Assistant Professor	Modern and Classical Languages & Literatures	Reg	9	10-Aug-18	100	$ 63,000	
Natural Resources & Environment								
Pingel, Thomas	Associate Professor - Tenured	Geography	Reg	9	10-Aug-18	100	$ 80,000	
Science								
Bose, Niloy	Professor - Tenured	Economics	Reg	9	10-Aug-18	100	$ 150,000	
Cui, Xingshan	Assistant Professor	Mathematics	Reg	9	10-Aug-18	100	$ 82,500	
Martin, Eileen	Assistant Professor	Mathematics	Reg	9	10-Aug-18	100	$ 90,000	

TEACHING AND RESEARCH FACULTY

ADJUSTMENTS

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
Agriculture & Life Sciences								
Grant, Jason	Associate Professor	Agricultural & Applied Economics	Reg	12	10-Mar-18	100	$ 207,280	
Architecture & Urban Studies								
Velez, Anne-Lise	Collegiate Assistant Professor	Dean - Architecture	Reg	9	25-Feb-18	100	$ 72,000	
Business								
Klock, Derek	Associate Professor of Practice	Finance, Insurance & Business Law	Reg	9	25-Dec-17	100	$ 100,000	
Thompson, Phillip	Assistant Professor	Management	Reg	9	25-Dec-17	100	$ 170,000	
Science								
Phillips, Kristin	Collegiate Assistant Professor	School of Neuroscience	Reg	9	25-Dec-17	100	$ 96,000	

ADMINISTRATIVE AND PROFESSIONAL FACULTY

NEW APPOINTMENTS

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
Executive Vice President & Provost								
Horn, Kimberly	Associate Vice President - Tenured	Vice President for Health Sciences & Technology	Reg	12	1-Mar-18	100	$ 250,000	
Johnson, Cynda	Dean and Professor - Tenured	Virginia Tech Carilion School of Medicine, Health and Medical Education	Reg	12	1-Jul-18	100	$ 615,000	
President								
Cooke, William	Associate Director, Strength & Conditioning, Football	Athletics	Reg	12	16-Jan-18	100	$ 60,000	
Hamilton, Justin	Director, Player Development	Athletics	Reg	12	5-Feb-18	100	$ 80,000	
Iezzi, John	Director, On-Campus Recruiting	Athletics	Reg	12	25-Mar-18	100	$ 40,800	
Jones, Samuel	Chief Engineer, HokieVision	Athletics	Reg	12	23-Jan-18	100	$ 58,000	
McCann, Erin	Director of Strategic Planning	Office of Strategic Affairs	Reg	12	25-Mar-18	100	$ 118,000	
Mervos, Daniel	Assistant Director, Equipment Services	Athletics	Reg	12	25-Mar-18	100	$ 40,000	
Senior Vice President for Operations and Administration								
Pinkney, Dwayne	Senior Vice President for Operations and Administration	Senior Vice President for Operations and Administration	Reg	12	1-Aug-18	100	$ 440,000	
Vice President for Advancement								
Cleveland, Daniel	Assistant Dean, Advancement, Liberal Arts & Human Sciences	University Development	Reg	12	19-Feb-18	100	$ 150,000	
Turek, Michelle	Principal Gifts Officer	University Development	Reg	12	1-Mar-18	100	$ 140,000	
Weaver, Jeremy	Assistant Dean, Advancement, College of Engineering	University Development	Reg	12	1-Jan-18	100	$ 230,000	
Vice President for Human Resources								
Banks, Ellen	HR Compliance and Policy Officer	Human Resources	Reg	12	8-Jan-18	80	$ 90,000	
Vice President for Research								
Ulsh, Richard	Director of Communications	Vice President for Research	Reg	12	10-Jan-18	100	$ 98,000	

ADMINISTRATIVE AND PROFESSIONAL FACULTY

ADJUSTMENTS

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
Agriculture & Life Sciences								
Chase, Melissa	Program Manager	Food Science and Technology	Reg	12	10-Jan-18	100	$ 65,667	
Close, David	Consumer Horticulture & Extension Master Gardener	Horticulture	Reg	12	10-Jan-18	100	$ 80,910	
Elliott, Alyssa	Extension Agent	Central District Cooperative Extension	Reg	12	10-Jan-18	100	$ 42,894	
Grant, Alan	Dean	College of Agriculture & Life Sciences	Reg	12	25-May-18	100	$ 311,172	
Grimes, Kelsey	Extension Agent	Southwest District Cooperative Extension	Reg	12	10-Jan-18	100	$ 53,270	
Johnson, Jeremy	State Program Leader, 4-H	4-H Centers and Admin	Reg	12	10-Jan-18	100	$ 79,500	
Oakes, Joseph	Superintendent	Eastern Virginia AREC	Reg	12	10-Feb-18	100	$ 72,000	
Verdu, Caitlin	Extension Agent	Arlington Cooperative Extension	Reg	12	10-Jan-18	100	$ 52,690	
Architecture & Urban Studies								
Blythe, Richard	Dean	Dean - Architecture	Reg	12	10-Feb-18	100	$ 330,000	
Dean of Libraries								
Gabrysch, Emily	Web Development Engineer	Library	Reg	12	10-Feb-18	100	$ 61,000	
McNabb, Kayla	Head, Instructional Content	Library	Reg	12	25-Mar-18	100	$ 62,000	
Executive Vice President & Provost								
Amelink, Catherine	Assistant Vice Provost for Learning Systems and Innovations	Learning Systems Innovations & Effectiveness	Reg	12	25-Jan-18	100	$ 120,000	
Guntoro, Bennu	Enrollment Management Data Analyst	Enrollment & Degree Management	Reg	12	10-Jan-18	100	$ 54,000	
Pratt-Clarke, Menah	Vice Provost for Inclusion and Diversity and Vice President for Strategic Affairs	Inclusion and Diversity	Reg	12	1-Jun-18	100		$ 12,000
Rikakis, Thanassis	Presidential Fellow for Academic	Provost Office	Reg	12	11-Apr-18	100		$ 12,500

continued

ADMINISTRATIVE AND PROFESSIONAL FACULTY

ADJUSTMENTS

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
Natural Resources & Environment								
Winistorfer, Paul	Dean	Natural Resources & Environment	Reg	12	25-May-18	100	$ 290,428	
President								
Adair, Charles	Head Women's Soccer Coach	Athletics	Reg	12	1-Mar-18	100	$ 160,000	
Babcock, Bradley W	Director of Athletics	Athletics	Reg	12	1-Jan-18	100	$ 700,088	
Brizendine, Michael	Head Men's Soccer Coach	Athletics	Reg	12	10-Feb-18	100	$ 96,000	
Brooks, Kenneth	Head Coach, Women's Basketball	Athletics	Reg	12	25-Mar-18	100	$ 550,000	
Capaldo, Stephen	University Legal Counsel	University Legal Counsel	Reg	12	1-Jul-18	100		$ 12,000
Chambers, Joshua	Director, Recruiting Operations, Men's Basketball	Athletics	Reg	12	25-Feb-18	100	$ 40,000	
Crosby, Robert	Senior Director, Strength & Conditioning, Football	Athletics	Reg	12	10-Jan-18	100	$ 85,000	
Foster, Robert	Defensive Coordinator	Athletics	Reg	12	1-Jan-18	100	$ 675,000	
Fuente, Justin	Head Coach, Football	Athletics	Reg	12	1-Jan-18	100	$ 550,000	
Gess, Mark	Associate Legal Counsel	University Legal Counsel	Reg	12	9-May-18	100		$ 30,000
					1-Jul-18	100		$ 12,000
Heidbreder, Kay	University Legal Counsel	University Legal Counsel	Reg	12	1-Jul-18	100		$ 20,000
Kinney, Jefferson	Associate Head Coach, Men's Soccer	Athletics	Reg	12	10-Mar-18	100	$ 60,000	
Kurek, Sharon	Executive Director	Audit Risk and Compliance	Reg	12	10-Jan-18	100	$ 221,807	
Lechtenberg, Adam	Assistant Head Coach and Executive Director	Athletics	Reg	12	25-Jan-18	100	$ 175,000	
Long, Peter	Assistant Director, Strategic Communications	Athletics	Reg	12	10-Jan-18	100	$ 48,000	
McClanahan, Hud	Associate Legal Counsel	University Legal Counsel	Reg	12	1-Jul-18	100		$ 12,000
Sands, Timothy D.	President	President - Administration	Reg	12	1-Jul-18	100	$ 575,000	
Shuman, John	Associate Director, Strength & Conditioning, Football	Athletics	Reg	12	10-Jan-18	100	$ 60,000	
Simmons, Charles	Assistant Director, Strength & Conditioning, Football	Athletics	Reg	12	10-Jan-18	100	$ 50,000	
Szefc, John	Head Coach, Baseball	Athletics	Reg	12	1-Jan-18	100	$ 425,000	
Wilson, Jill	Head Coach, Volleyball	Athletics	Reg	12	1-Mar-18	100	$ 130,000	

continued

ADMINISTRATIVE AND PROFESSIONAL FACULTY

ADJUSTMENTS

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
Vice President for Advancement								
Connoy, Amanda	Associate Director for Development	University Development	Reg	12	25-Feb-18	100	$ 61,000	
Clark, Karin	Associate Director for Business	University Development	Reg	12	25-Jan-18	100	$ 82,500	
Phlegar, Charles	Vice President for Advancement	Vice President for Advancement	Reg	12	1-Jun-18	100		$ 35,000
Wong, Emily	Associate Director of Development, College of Science	University Development	Reg	12	10-Feb-18	100	$ 69,000	
Vice President for Finance and CFO								
King, Stacy	Interim Associate Controller	Controller's Office	Reg	12	25-Feb-18	100	$ 120,000	
Orren, Ryan	Information Security Manager	Vice President for Finance	Reg	12	19-Mar-18	100	$ 61,000	
Webb, Brandon	Accounts Payable Manager	Controller's Office	Reg	12	25-Jan-18	100	$ 77,850	
Vice President for Human Resources								
Akers, Kimberly	Deputy to Interim VP for Human Resources and Interim Director of HR Operations	Human Resources	Reg	12	10-Feb-18	100	$ 84,000	
Vice President for Information Technology								
Louvet, Matthew	Coordinator of Online Services	Technology-Enhanced Learning and Online Strategies	Reg	12	25-Feb-18	100	$ 60,000	
Miller, Christa	Director of Inclusive Media Design	Technology-Enhanced Learning and Online Strategies	Reg	12	10-Mar-18	100	$ 61,370	
Warnick, Quinn	Director of Academic Innovation	Technology-Enhanced Learning and Online Strategies	Reg	12	10-Feb-18	100	$ 107,604	
Yaffe, Daniel	Learning Technologies Specialist	Technology-Enhanced Learning and Online Strategies	Reg	12	25-Jan-18	100	$ 57,500	

continued

ADMINISTRATIVE AND PROFESSIONAL FACULTY

ADJUSTMENTS

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
Vice President for Operations								
Hillman, James	Interim Director of Facilities Finance	Vice President for Operations	Reg	12	25-Jan-18	100	$ 116,412	
Lau, Jamie	Director of Administration	Police	Reg	12	25-Feb-18	100	$ 85,406	
McCoy, Virginia	Interim Director, Printing and Mail Services	Mail Services	Reg	12	10-Feb-18	100	$ 83,950	
Vice President for Outreach and International Affairs								
Hanlin, Lesa	Executive Director of Roanoke Regional Initiatives	Virginia Tech Roanoke Center	Reg	12	10-Feb-18	100	$ 128,000	

RESEARCH FACULTY

ADJUSTMENTS

NAME	TITLE	DEPARTMENT	REG or RSTR	MONTHS	CURRENT ACTION			
					EFF DATE	% APPT	ANNUAL RATE	
							BASE	ONE-TIME
Science								
Chapman, Martin	Research Professor	Geosciences	Reg	9	1-Jul-18	100	$ 94,764	

2018-19 Promotion, Tenure, and Continued Appointment Program

ACADEMIC, RESEARCH, AND STUDENT AFFAIRS COMMITTEE AND FINANCE AND RESOURCE MANAGEMENT COMMITTEE

April 16, 2018

Traditionally, increases for faculty promoted in the spring are effective at the beginning of the academic year (or in the case of calendar-year faculty, at the beginning of the fiscal year). Consistent with the 2017-18 faculty compensation plan, salary adjustments are proposed at this time for teaching and research faculty who have been promoted in rank during the 2017-18 academic year. The following raises are recommended for promotions to:

Professor	$7,000
Associate Professor	5,000
Assistant Professor	3,000

There are four non-tenure track clinical faculty ranks beginning with Clinical Instructor. Those clinical faculty members with outstanding performance may be considered for promotion in rank. The following raises are recommended for promotions to:

Clinical Professor	$7,000
Clinical Associate Professor	5,000
Clinical Assistant Professor	3,000

There are three non-tenure track professor of practice faculty ranks. Instructors may be promoted into the Assistant Professor of Practice rank. Those professor of practice faculty members with outstanding performance may be considered for promotion in rank. The following raises are recommended for promotions to:

Professor of Practice	$7,000
Associate Professor of Practice	5,000
Assistant Professor of Practice	3,000

There are three ranks for faculty on the instructor track: Instructor, Advanced Instructor, and Senior Instructor. The following raises are recommended for promotions to:

Senior Instructor	$5,000
Advanced Instructor	3,000

Extension faculty are also eligible for promotion in rank. The three ranks of extension faculty are Associate Agent, Agent, and Senior Agent. The following raises are recommended for promotions to:

Senior Agent	$5,000
Agent	3,000

RECOMMENDATION:

That the following faculty are recommended for promotion and/or tenure or continued appointment in accordance with the faculty compensation plan.

June 4, 2018

Attachment

Attachment OO

Name	Promoted Rank	Recommended Salary 2018-19	Appt [1]	Increase over 2017-18 Amount	Increase over 2017-18 Percent	Code
COLLEGE OF AGRICULTURE & LIFE SCIENCES						
Barone, Justin Robert	Professor	$ 140,415	CY	$ 7,000	5.25	2
Boyer, Renee Raiden	Professor	112,418	AY	7,000	6.64	2
Ealy, Alan Dale	Professor	113,650	AY	7,000	6.56	2
Eifert, Joseph D	Professor	105,009	AY	7,000	7.14	2
Frame, William Hunter	Associate Professor	93,946	CY	5,000	5.62	3
Friedel, Curtis Robert	Associate Professor	89,636	AY	5,000	5.91	3
Hulver, Matthew Wade	Professor	216,500	CY	7,000	3.34	2
Johnson, Sally E.	Professor	152,050	AY	7,000	4.83	2
Kuhn, David D	Associate Professor	90,780	AY	5,000	5.83	3
Sridhar, Venkataramana R	Associate Professor	104,200	AY	5,000	5.04	3
Wang, Xiaofeng	Associate Professor	98,500	AY	5,000	5.35	3
Zhu, Jinsong	Professor	128,786	CY	7,000	5.75	2
COLLEGE OF ARCHITECTURE & URBAN STUDIES						
Blanchard, Samuel Paul	Associate Professor	82,060	AY	5,000	6.49	3
Doan, Patrick A	Associate Professor	83,060	AY	5,000	6.41	3
Heavers, Nathan	Associate Professor	85,350	AY	5,000	6.22	3
Ishida, Aki	Associate Professor	87,535	AY	5,000	6.06	3
Lemaire, Robin Hargroder	Associate Professor	83,015	AY	5,000	6.41	3
Wernstedt, Kris Frederic	Professor	105,880	AY	7,000	7.08	2
Zellner Bassett, Paola A [4]	Associate Professor	87,661	AY	5,000	6.05	3
PAMPLIN COLLEGE OF BUSINESS						
Becker, William J	Associate Professor	199,345	AY	0	0.00	1
Daniloski, Kimberly	Associate Professor	71,370	AY	5,000	7.53	2
Easterwood, Cintia M	Assistant Professor	84,600	AY	3,000	3.68	2
Garner, Dana Porter	Assistant Professor	82,050	AY	3,000	3.80	2
Martin, Eric Alan	Assistant Professor	80,520	AY	3,000	3.87	2
Seref, Michelle Marie Ha	Associate Professor	148,200	AY	5,000	3.49	2
COLLEGE OF ENGINEERING						
Abbas, Montasir Mahgoub	Professor	113,037	AY	7,000	6.60	2
Cherbaka, Natalie Stanis	Associate Professor	75,492	AY	5,000	7.09	2
Dymond, Randel L	Professor	124,769	AY	7,000	5.94	2
Foster, Earl Johan	Associate Professor	112,511	AY	0	0.00	1
Gabbard, Joseph L.	Associate Professor	156,810	CY	0	0.00	1
Ghaffarzadegan, Navid	Associate Professor	112,569	AY	5,000	4.65	3
Hin, Celine [4]	Associate Professor	102,872	AY	5,000	5.11	3
Katz, Bryan J	Associate Professor	55,400	CY	5,000	9.92	2
Knight, David B	Associate Professor	120,144	AY	5,000	4.34	3
Koutromanos, Ioannis	Associate Professor	102,687	AY	5,000	5.12	3
Leonessa, Alexander	Professor	132,736	AY	7,000	5.57	2
Li, Qiang	Associate Professor	134,534	CY	5,000	3.86	3
MacKenzie, Allen B	Professor	115,933	AY	7,000	6.43	2
McPherson, David Patrick	Advanced Instructor	70,524	AY	3,000	4.44	2
Mueller, Rolf	Professor	126,814	AY	7,000	5.84	2
Poelzing, Steven	Associate Professor	180,207	CY	0	0.00	1
Qiao, Rui	Professor	133,040	AY	7,000	5.55	2
Ripepi, Nino S	Associate Professor	131,905	CY	5,000	3.94	3
Rowson, Steven	Associate Professor	153,272	CY	5,000	3.37	3
Ruohoniemi, John Michael	Professor	177,900	CY	7,000	4.10	2
Verbridge, Scott	Associate Professor	150,415	CY	5,000	3.44	3
Yu, Guoqiang	Associate Professor	103,629	AY	5,000	5.07	3

Name	Promoted Rank	Recommended Salary 2018-19	Appt [1]	Increase over 2017-18 Amount	Increase over 2017-18 Percent	Code
COLLEGE OF LIBERAL ARTS & HUMAN SCIENCES						
Abbate, Janet E	Professor	100,947	AY	7,000	7.45	2
Agmon, Danna	Associate Professor	87,506	AY	5,000	6.06	3
Azano, Amy Price	Associate Professor	78,695	AY	5,000	6.78	3
Cana Jimenez, Maria D	Associate Professor	72,436	AY	5,000	7.41	3
Crafton, Jason A	Associate Professor	69,246	AY	5,000	7.78	3
Few-Demo, April L	Professor	101,810	AY	7,000	7.38	2
Gabriele, Matthew R	Professor	95,785	AY	7,000	7.88	2
Grafsky, Erika L	Associate Professor	73,814	AY	5,000	7.27	3
Hofer, Stefanie	Associate Professor	70,042	AY	5,000	7.69	3
Hwang, Eunju	Associate Professor	73,803	AY	5,000	7.27	3
Ivory, James Dee	Professor	100,594	AY	7,000	7.48	2
Jantzen, Benjamin C	Associate Professor	84,646	AY	5,000	6.28	3
Kiechle, Melanie A	Associate Professor	76,208	AY	5,000	7.02	3
Labuski, Christine	Associate Professor	74,092	AY	5,000	7.24	3
Mesmer, Heidi Anne Edelb	Professor	89,459	AY	7,000	8.49	2
Olson, Philip R	Associate Professor	70,526	AY	5,000	7.63	3
Patton, Lydia K	Professor	106,306	AY	7,000	7.05	2
Read, Dustin	Associate Professor	129,948	AY	5,000	4.00	3
Savla, Jyoti Shital	Professor	96,994	AY	7,000	7.78	2
Scallorns, Joseph R	Senior Instructor	49,709	AY	5,000	11.18	2
Serna, Gabriel Ramon	Associate Professor	82,316	AY	5,000	6.47	3
Sinno, Nadine Adel	Associate Professor	81,666	AY	5,000	6.52	3
Stewart, Trevor T	Associate Professor	73,645	AY	5,000	7.28	3
Ulrich, Catherine Louise	Associate Professor	69,958	AY	5,000	7.70	3
Wells, John Gaulden	Professor	99,633	AY	7,000	7.56	2
Winling, LaDale C	Associate Professor	76,937	AY	5,000	6.95	3
Zhu, Haiyan	Associate Professor	72,832	AY	5,000	7.37	3
COLLEGE OF NATURAL RESOURCES & ENVIRONMENT						
Baird, Timothy David	Associate Professor	81,372	AY	5,000	6.55	3
Horvath, Laszlo	Associate Professor	88,786	AY	5,000	5.97	3
Jiao, Yan	Professor	101,241	CY	7,000	7.43	2
Stern, Marc J	Professor	95,322	AY	7,000	7.93	2
COLLEGE OF SCIENCE						
Caddick, Mark James	Associate Professor	90,700	AY	5,000	5.83	3
Chung, Matthias	Associate Professor	86,160	AY	5,000	6.16	3
Diana, Rachel A	Associate Professor	90,700	AY	5,000	5.83	3
Eddleton, Jeannine E	Senior Instructor	60,335	AY	5,000	9.04	2
Gill, Benjamin C	Associate Professor	89,950	AY	5,000	5.89	3
Hart, Heath D	Senior Instructor	52,445	AY	5,000	10.54	2
Hauf, Silke	Associate Professor	93,322	AY	5,000	5.66	3
Hogan, Eric Phillip	Advanced Instructor	61,279	AY	3,000	5.15	2
Long, Victoria Kathleen	Advanced Instructor	53,772	AY	3,000	5.91	2
Matson, John	Associate Professor	98,474	AY	5,000	5.35	3
McGlothlin, Joel W	Associate Professor	92,763	AY	5,000	5.70	3
Saenz Maldonado, Edgar A	Advanced Instructor	41,195	AY	3,000	7.85	2
Santos, Webster	Professor	143,117	AY	7,000	5.14	2
Scarpa-Friedman, Angela	Professor	103,400	AY	7,000	7.26	2
Tholl, Dorothea Berta Ch	Professor	100,947	AY	7,000	7.45	2
Ufferman, Eric	Advanced Instructor	42,686	AY	3,000	7.56	2
Valdez, Gregorio	Associate Professor	135,392	CY	5,000	3.83	3
White, Susan Williams	Professor	153,158	CY	7,000	4.79	2
Zhu, Hongxiao	Associate Professor	99,884	AY	5,000	5.27	3
COLLEGE OF VETERINARY MEDICINE						
Boes, Katie Mae	Associate Professor	116,458	CY	5,000	4.49	2
Burns, Travis Dean	Associate Professor	96,800	CY	5,000	5.45	2
Byron, Christopher R	Associate Professor	138,884	CY	0	0.00	1
Dervisis, Nikolaos	Associate Professor	139,483	CY	5,000	3.72	3
He, Jia-Qiang	Associate Professor	109,577	AY	5,000	4.78	3
Klahn, Shawna L	Associate Professor	128,471	CY	5,000	4.05	2
LeRoith, Tanya	Professor	143,103	CY	7,000	5.14	2
Luo, Xin	Associate Professor	107,624	AY	5,000	4.87	3
Ruth, Jeffrey	Associate Professor	140,289	CY	5,000	3.70	2
Theus, Michelle Hedrick	Associate Professor	142,315	CY	5,000	3.64	3

Name	Promoted Rank	Recommended Salary 2018-19	Appt [1]	Increase over 2017-18 Amount	Increase over 2017-18 Percent	Code
DEAN OF LIBRARIES						
Speer, Ryan	Assistant Professor	64,412	CY	0	0.00	4
VIRGINIA COOPERATIVE EXTENSION						
Alt, Theresa Joan	Agent	55,974	CY	3,000	5.66	2
Carter, Katherine Entsmi	Agent	55,966	CY	3,000	5.66	2
Cox, Erin Elizabeth	Agent	47,965	CY	3,000	6.67	2
Eigel, Bethany A	Senior Agent	66,805	CY	5,000	8.09	2
Flanagan, Roy David	Agent	62,266	CY	3,000	5.06	2
Hilleary, James Edward	Agent	75,369	CY	3,000	4.15	2
Lawrence, Mary Catherine	Agent	45,898	CY	3,000	6.99	2
Mallory, Kelly Morris	Senior Agent	57,453	CY	5,000	9.53	2
Mitchell, Sonja T	Agent	56,170	CY	3,000	5.64	2
Pottorff, Stephen L	Agent	54,829	CY	3,000	5.79	2
Rose, Kelly Mullins	Agent	48,925	CY	3,000	6.53	2
Sponaugle, Kari Botkin	Agent	50,065	CY	3,000	6.37	2
Spurlin, Kevin M	Senior Agent	66,287	CY	5,000	8.16	2
Temple, Karrin M	Agent	51,215	CY	3,000	6.22	2
Vargo, Ann F.	Agent	48,691	CY	3,000	6.57	2
Vest, Jonathan M	Senior Agent	63,539	CY	5,000	8.54	2
Yager, Kristina Anne	Agent	45,525	CY	3,000	7.05	2
	Total Promotion & Tenure Adjustments			**$ 613,000**		

Summary of Promotion and Tenure Adjustments

Promoted Rank	Increase	Number of Adjustments	Total Amount
Agent	$ 3,000	13	$ 39,000
Senior Agent	5,000	4	20,000
Assistant Professor [2]	3,000	4	9,000
Associate Professor [2]	5,000	66	305,000
Professor	7,000	30	210,000
Advanced Instructor	3,000	5	15,000
Senior Instructor	5,000	3	15,000
Subtotal Promotion and Tenure Adjustments		**125**	**613,000**
Associated Fringe Benefit Costs [3]			**148,775**
TOTAL COST OF PROMOTION AND TENURE ADJUSTMENTS			**$ 761,775**

Codes:

1: Tenure
2: Promotion
3: Promotion with Tenure
4: Continued Appointment
5: Promotion and Continued Appointment

Notes

(1) AY denotes an Academic Year appointment, while CY denotes a calendar year appointment.
(2) Five Associate Professors and one Assistant Professor received tenure but no salary increase.
(3) Based upon university-wide average variable fringe benefit rate. Actual results may vary slightly depending upon specific employee attributes.
(4) Promotion effective retroactively due to error in prior process.

RESOLUTION ON NAMING AN INTERVIEW ROOM IN THE SMITH CAREER CENTER FOR GEICO

WHEREAS, GEICO has been a sustaining and generous supporter of the students and programs at Virginia Tech; and

WHEREAS, GEICO is a successful organization that has provided philanthropic funding to the university in many areas through outright support and its matching gift program which increases the impact of the generosity of GEICO and that of its employees; and

WHEREAS, GEICO has also had a steady and effective recruitment presence, attending Virginia Tech career fairs, conducting information sessions and presentations, and interviewing students on campus; and

WHEREAS, GEICO has provided Virginia Tech students the opportunity to learn through summer internships and start their careers with full-time jobs upon graduation, helping to prepare them to make informed decisions regarding their professional endeavors; and

WHEREAS, GEICO has been, and continues to be, a valued member of the university community;

NOW, THEREFORE, BE IT RESOLVED, that in acknowledgement of the service and generosity of GEICO, and in recognition of past and future benefits to the university, an interview room in the Smith Career Center will be known as the GEICO Interview Room for a period of ten (10) years commencing June 2018.

RECOMMENDATION:

That the above resolution naming the GEICO Interview Room for a period of ten (10) years, in accordance with university policy, be approved.

June 4, 2018

RESOLUTION OF APPRECIATION HONORING W. TAYLOR REVELEY, III PRESIDENT OF THE COLLEGE OF WILLIAM AND MARY

WHEREAS, W. Taylor Reveley, III was sworn in as the 27th President of The College of William and Mary in September of 2008, after serving for ten years as the 20th Dean of the William & Mary Law School; and

WHEREAS, President Reveley received a bachelor's degree from Princeton University and a law degree from the University of Virginia, then went on to study war powers as an International Affairs Fellow of the Council on Foreign Relations and a Fellow of the Woodrow Wilson Center for Scholars, and to author *War Powers of the President and Congress: Who Holds the Arrows and Olive Branch?* before becoming a managing partner at Hunton & Williams, where he specialized in energy law prior to being named Dean of the William & Mary Law School; and

WHEREAS, President Reveley, a proponent of BHAGS (big hairy audacious goals), oversaw development of a new strategic plan for The College of William and Mary and worked tirelessly toward achieving its goals. During his tenure, the campus expanded with more than 1.5 million square feet of new construction or renovated space; a $1 billion fundraising campaign was launched to minimize dependence on state funds and is on track to succeed; and the College Curriculum was adopted to strengthen liberal arts education through an integrated, interdisciplinary general curriculum. Additionally, significant progress was achieved towards making William & Mary a more inclusive campus as diversification of the student body accelerated, the number of international students and scholars tripled, research was begun to explore the legacy of slavery and segregation at the institution, and two residence halls were named for prominent African-Americans in the school's history; and,

WHEREAS, under President Reveley's leadership, the school's tuition structure was changed and serves as a model of other universities. Under the new structure, the price was raised for incoming freshmen but guaranteed not to increase for four years, thus allowing more funds for financial aid to in-state students and increasing faculty salaries; and

WHEREAS, President Reveley has served as a member of numerous cultural and educational boards, such as that of Princeton University, Union Theological Seminary, St. Christopher's School, the Andrew W. Mellon Foundation, the Carnegie Endowment for International Peace, the Virginia Museum of Fine Arts, the Virginia Historical Society, the Virginia Foundation for the Humanities, and the Richmond Symphony, among others; and

WHEREAS, President Reveley has been a vital contributor to the work of the Virginia Council of Presidents and a valued colleague of Virginia Tech's President Emeritus Charles Steger and President Tim Sands;

NOW, THEREFORE BE IT RESOLVED that the members of the Board of Visitors of Virginia Polytechnic Institute and State University wish to acknowledge formally President W. Taylor Reveley, III upon his retirement for his ten years of outstanding leadership of The College of William and Mary and hereby extend their sincere appreciation to President Reveley for the positive impact his presidency has had not only on his own institution, but also on the Commonwealth of Virginia, as well as for his valued partnership and support of Virginia Tech, and send best wishes for a fulfilling retirement.

RECOMMENDATION:

That the above resolution honoring W. Taylor Reveley, III upon his retirement for his 10 years of outstanding service as the 27th President of The College of William and Mary be adopted.

June 4, 2018

RESOLUTION OF APPRECIATION HONORING
TERESA A. SULLIVAN
EIGHTH PRESIDENT OF THE UNIVERSITY OF VIRGINIA

WHEREAS, Dr. Teresa A. Sullivan was appointed the Eighth President of the University of Virginia in 2010, becoming the first female ever to hold the position; and

WHEREAS, Dr. Sullivan received her doctorate in Sociology from the University of Chicago, and is a nationally recognized labor demographer, having authored six books and over 80 scholarly journals on the topic; and

WHEREAS, during her presidency, Dr. Sullivan launched the strategic Cornerstone Plan, which has since led to the formation of UVA's Pan-University Institutes, the endowed Data Science Institute, and the Strategic Investment Fund. She developed a new financial model to ensure stability and transparency and led the university to the completion of its $3 billion capital campaign, which has been used to fund priorities such as renovating the Rotunda and returning it in part to a student-oriented activity center; providing start-up funds for new faculty; and stabilizing AccessUVA, the university's signature financial aid program; and

WHEREAS, Dr. Sullivan created a new strategic vision for the University of Virginia Health System in which an emphasis was placed on the patient experience, resulting in the hospital recently being named one of the best in the nation; and

WHEREAS, Dr. Sullivan dedicated her time to enhancing the overall student experience through initiatives such as the creation of a new minor in entrepreneurship; the Georges Student Center to aid in career, personal, and academic advising; and the multi-year Meriwether Lewis Institute for Citizen Leadership Fellowship; and

WHEREAS, President Sullivan has worked diligently to make UVA a more inclusive institution that today has an undergraduate population composed of 54 percent women and 35 percent minorities that is drawn from 49 states and 124 foreign nations. And her establishment of the President's Commission on Slavery and the subsequent Commission on the University in the Age of Segregation in order to develop a more complete history of UVA that acknowledges the contributions of those who had been forgotten or ignored has been a model for other universities; and

WHEREAS, Dr. Sullivan has further served the educational community as a Fellow of the American Academy of Arts & Sciences and of the American Association for the Advancement of Science, Chair of the Council of Presidents for the Association of Governing Boards of Universities and Colleges and the Council of Presidents of the Association of Public and Land-grant Universities, Co-Chair of the National Research Council's Committee on Improving Higher Education's Responsiveness to Regional STEM Workforce Needs, and as a member of the Advisory Board for the Northern Virginia Technology Council, the executive committee of the Virginia Business Higher Education Council, the Business Higher Education Forum; and the Innovation and Entrepreneurship Investment Authority; and

WHEREAS, the good-natured and spirited sports rivalry between the Cavaliers and Hokies belies a mutual respect and strong partnership between the University of Virginia and Virginia Tech and their presidents that has produced the Virginia Innovation Partnership, the Commonwealth Center for Advanced Manufacturing, and the UVA-Virginia Tech Carilion Neuroscience Research Collaboration, to name just a few of the more recent joint initiatives; and

WHEREAS, President Sullivan has been a trusted and valued colleague of President Emeritus Charles Steger and President Tim Sands, and together they have worked—frequently collaborating with other Virginia university presidents and business leaders—to address common issues and advance the needs of higher education with leaders in state government in Virginia;

NOW, THEREFORE BE IT RESOLVED that the members of the Board of Visitors of Virginia Polytechnic Institute and State University wish to acknowledge formally President Teresa A. Sullivan for her eight years of outstanding leadership of the University of Virginia and hereby extend their sincere appreciation to President Sullivan upon her retirement for her valued partnership and support of Virginia Tech and the positive impact her tenure has had not only her own institution, but also on the Commonwealth of Virginia and higher education nationwide, and send their best wishes for a fulfilling retirement.

RECOMMENDATION:

That the above resolution honoring Teresa A. Sullivan upon her retirement for her eight years of outstanding service as the 8th President of the University of Virginia be adopted.

June 4, 2018